



State of Utah
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

Michael O. Leavitt
Governor

Kathleen Clarke
Executive Director

Lowell P. Braxton
Division Director

1594 West North Temple, Suite 1210

PO Box 145801

Salt Lake City, Utah 84114-5801

801-538-5340

801-359-3940 (Fax)

801-538-7223 (TDD)

ACE DISPOSAL

April 20, 1999

Mike Keele
Ace Oilfield Disposal Inc.
827 South 1500 West
Vernal, Utah 84078

Re: Approval to Operate Produced Water Evaporation Pit # 5, Ace Oilfield Disposal Facility, Section 2, Township 6 South, Range 20 East, Uintah County, Utah

Dear Mr. Keele:

The Division has inspected the evaporation pit at the above referenced location and has found it to be in compliance with current regulations. This pit is therefore approved for the disposal of produced water.

Please be reminded that the pit is to have at least 2 feet of freeboard at all times and that spraying of water should be closely monitored. Excessive overspray is considered as an illegal surface discharge and can result in closure of the facility. Please provide quarterly reports to this office which contain copies of documentation of weekly leak detection inspections as well as an accounting of the volume of water disposed of at this facility.

If you have any questions concerning this approval please contact Brad Hill or Gil Hunt at this office.

Sincerely,

A handwritten signature in dark ink, appearing to read 'John R. Baza'.

John R. Baza
Associate Director



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ACE DISPOSAL

June 18, 2002

Mike Keele
Ace Oilfield Disposal
827 South 1500 West
Vernal, Utah 84078

Re: Approval to Operate Oilfield Waste Composting Site: Sec. 2, T. 6S., R. 20E., Uintah County, Utah

Dear Mr. Keele,

The Division received the application to operate a waste composting pit at your produced water disposal facility on May 28, 2002. Your request to landfarm drilling muds, cuttings and onsite generated oily waste meets Division requirements. Your request is hereby approved.

This permit is valid for the remediation of RCRA exempt Exploration and Production oily wastes only, such as waste crude oil, tank bottoms, drilling mud and cuttings. At no time is any non-exempt waste or refuse to be accepted, stored or remediated at the site. There is to be no free-standing oil within the confines of the composting area at any time. Current records shall be kept of all materials received by the facility. For the duration of this permit the Division shall be provided with monthly reports which include the volume and types of materials received as well as the volumes of materials which have been determined to be successfully remediated during the month. The Division shall be consulted prior to any changes in your operational procedure to allow for any needed amendments to this permit. The Division shall also be notified prior to moving any remediated material from the composting area. Prior to abandonment, the landfarmed material must meet cleanup levels for salinity and hydrocarbons as follows:

Electrical conductivity <4mmho/cm or background, whichever is less.

Total petroleum hydrocarbons of 10,000 ppm or background, whichever is less.

This approval does not exempt you from complying with all other federal, state and local rules and ordinances.

If you have any questions concerning this letter please contact Brad Hill at (801) 538-5315 or Gil Hunt at (801) 538-5297.

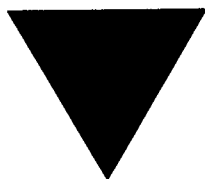
Sincerely,

A handwritten signature in black ink, appearing to read 'J. R. Baza'.

John Baza
Associate Director

er

cc: Uintah County Planning Office



WOLVERINE GAS AND OIL CORPORATION

Energy Exploration in Partnership with the Environment

March 10, 2004

United States Department of the Interior
Bureau of Land Management
Richfield Field Office
150 East 900 North
Richfield, Utah 84701

RE: Designated Agent Contact Information: Wolverine Federal #17-2

To Whom It May Concern:

Wolverine Gas and Oil of Utah, LLC (Wolverine) is designating Western Land Services, Inc. as Agent for the Wolverine Federal #17-2. Questions, deficiencies and clarifications regarding this APD package should be directed to the following contacts with Western Land Services, Inc:


Donald Anderson
54 West Seymour, Sheridan, WY 82801
Office: 307-673-1817
Cell: 307-752-7200
E-mail: don.anderson@westernls.com
OR:
Shawn Burd
Cell: 307-751-5156
E-mail: shawn.burd@westernls.com

Approvals or other notifications should be directed to me at Wolverine and to the Agent named above. My contact information is as follows:

Richard Moritz
Wolverine Gas and Oil Company of Utah, LLC
One Riverfront Plaza, 55 Campau NW
Grand Rapids, MI 49431
Office Phone: (616) 458-1150 (ext. 119)
E-mail: rmoritz@wolvgas.com

Sincerely,

Wolverine Gas and Oil Company of Utah, LLC


Richard Moritz
Vice-President, Land & Legal


WESTERN LAND SERVICES

RECEIVED
MAR 16 2004
DIV. OF OIL, GAS & MINING

March 15, 2004

Utah Division of Oil, Gas and Mining
C/o Diana Whitney
1594 West North Temple, Suite 1210
Salt Lake City, Utah 84114-5801

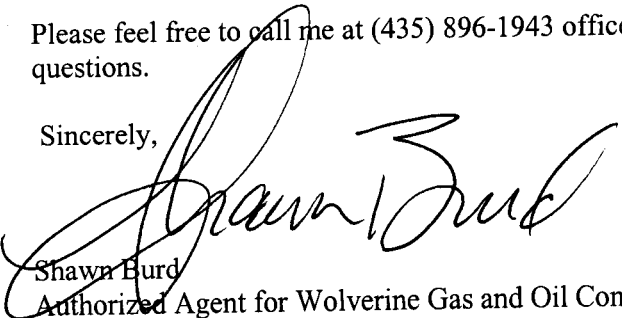
RE: Wolverine Federal #17-2; T23S – R1W, Section 17: SE/SW, Sevier County, Utah

Dear Diana:

On Friday, March 12, 2004 I submitted the Wolverine Federal #17-2 APD and POD to the Bureau of Land Management, Richfield Field Office. I talked with Lisha Cordova this afternoon to inform her that I would be submitting the same information to your office. Lisha informed me that I needed to send this to your attention, since you initially review the packet for completeness.

Please feel free to call me at (435) 896-1943 office or (307) 751-0330 cell, should you have any further questions.

Sincerely,


Shawn Burt

Authorized Agent for Wolverine Gas and Oil Company of Utah, LLC

WESTERN LAND SERVICES, INC.

54 W. Seymour Street • Sheridan, Wyoming 82801 • Phone: (307) 673-1817 • Fax: (307) 673-1823

Web: www.westernls.com • E-mail: wlswest@westernls.com

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

FORM APPROVED
OMB No. 1004-0136
Expires January 31, 2004

1a. Type of work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. UTU-73528
1b. Type of Well: <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other <input checked="" type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name
2. Name of Operator Wolverine Gas and Oil Company of Utah, LLC		7. If Unit or CA Agreement, Name and No. Wolverine Fed. Exploration Unit
3a. Address One Riverfront Plaza, 55 Campan NW Grand Rapids, MI 49503-2616		8. Lease Name and Well No. Wolverine Federal #17-2
3b. Phone No. (include area code) 616-458-1150		9. API Well No. 43-041-30031
4. Location of Well (Report location clearly and in accordance with any State requirements.) At surface SE/SW 869' FSL & 1901' FWL 38.79739 At proposed prod. zone SAME 4294500 X 418899 X -111.93390		10. Field and Pool, or Exploratory Exploratory
14. Distance in miles and direction from nearest town or post office* 5.9 miles South of Sigurd, Utah		11. Sec., T. R. M. or Blk. and Survey or Area SESW, Section 17, T23S-R1W
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)	16. No. of acres in lease	12. County or Parish Sevier
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.	19. Proposed Depth 9,100 ft.	13. State UT
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 5834.5' - GL	22. Approximate date work will start* 05/25/2004	17. Spacing Unit dedicated to this well
		20. BLM/BIA Bond No. on file WY 3329
		23. Estimated duration Drilling: 60 days

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No.1, shall be attached to this form:

- Well plat certified by a registered surveyor.
- A Drilling Plan.
- A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office).
- Bond to cover the operations unless covered by an existing bond on file (see item 20 above).
- Operator certification
- Such other site specific information and/or plans as may be required by the authorized officer.

25. Signature <i>Richard D. Moritz</i>	Name (Printed/Typed) Richard Moritz	Date 03/10/2004
Title Vice-President, Land & Legal		
Approved by (Signature)	Name (Printed/Typed)	Date
	Office	

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.
Conditions of approval, if any, are attached.

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

*(Instructions on page 2)

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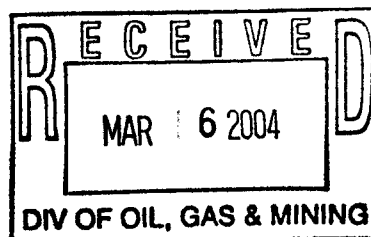


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WOLVERINE GAS & OIL OF UTAH, LLC

Wolverine Federal #17-2
SE SW SEC. 17-T23S-R1W
SEVIER CO., UTAH

DRILLING PROGNOSIS

1. Estimated tops of important geological markers – TVD:

Estimated G.L.
Estimated K.B.

5,835 ASL
5,858 ASL

<u>Formation</u>	<u>Lithology</u>	<u>Interval</u>
Quaternary	Unconsolidated sediments	0'-400'
Arapien	Shale, siltstone, salt, evaporites	400'-5,518'
Twin Creek 1	Carbonates	5,518'-5,810'
Navajo 1	Sandstone w/ minor shale	5,810'-7,036'
Kayenta	Sandstone w/ minor shale	7,036'-7,184'
Wingate SS	Sandstone w/ minor shale	7,184'-7,750'
Twin Creek 2	Carbonates	7,750'-8,062'
Navajo 2	Sandstone w/ minor shale	8,062'-9,059'
Total Depth		9,100'

2. Estimated depths of anticipated water, oil, gas or mineral formations:

Formation	Interval	
Navajo 1	5,810'-7,036'	water/gas/oil - possible
Kayenta	7,036'-7,184'	water possible
Wingate SS	7,184'-7,750'	water possible
Navajo 2	8,062'-9,100'	water/gas/oil - possible

3. Proposed hole sizes, casing size and cementing program:

The proposed well will be drilled to a TVD of 9,100'. There is no directional work planned.

A.) Hole size and casing program:

Hole Size	Casing Size	Wt./Ft.	Grade	Joint	Measured Depth Set
17½"	13-3/8"	54.5#	K-55	STC	0'-1,500'
12¼"	9-5/8"	53.5#	S-95	LTC	0'-5,620'
7-7/8"	5½"	17#	L-80	LTC	0'-9,100'

Hole Size	Casing Size	Drift ID, in.	OD of Couplings	Annular Volume in OH, cf/ft	Annular Volume in Csg, cf/ft	Capacity of casing, cf/ft
17½"	13-3/8"	12.459	14.375	0.6946	N/A	0.8679
12¼"	9-5/8"	8.379	10.625	0.3127	0.3627	0.3973
7-7/8"	5½"	4.767	6.050	0.1733	0.2323	0.1305

Casing Mechanical Properties:

Casing Size	13-3/8"	9-5/8"	5-1/2"
Casing Grade	K-55	S-95	L-80
Wt. of Pipe #/ft	54.5	53.5	17
Setting Depth	1500	5620	9100
Max Mud Weight Inside	8.5	10.7	8.9
Max Mud Weight Outside	8.5	10.7	8.9
Desired Cement Top	Surface	4620	5400
Hydrostatic Inside (dry outside), psi	678.0	3142.0	4226.5
Min. Internal Yield, psi	2730	9410	7740
Burst Safety Factor	4.03	2.99	1.83
Hydrostatic Outside (dry inside), psi	678.0	3142.0	4226.5
Collapse Resistance, psi	1130	7330	6280
Collapse Safety Factor	1.67	2.33	1.49
Weight in Air, 000's of #'s	81.75	300.67	154.7
Body Yield, 000's of #'s	853	1477	397
Joint Strength, 000's of #'s	547	1220	348
Ratio - Weight/Body Yield	0.0958	0.2036	0.3897
Tension Safety Factor	6.69	4.06	2.25

Casing strings will be pressure tested to 0.22 psi/foot of casing string length or 1500 psig, whichever is greater (not to exceed 70% of the internal yield of the casing), after cementing and prior to drilling out from under the casing shoe.

A pressure integrity test will be done at each casing shoe. The formation at the shoe will be tested to a minimum of the mud weight equivalent anticipated to control formation pressure to the next casing depth. This test will be performed before drilling more than 20' of new hole.

B) Cementing program:

Surface Casing: Cement job is designed to circulate cement to surface. Slurry yield is 1.20 ft³/sx., 15.6 ppg

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1,750 sx Premium Plus Cement w/ .94#/sx Premium plus (cement – API), 2% Calcium Chloride (accelerator) and 0.25#/sx Flocele (fluid loss additive).

Intermediate Casing: Cement job is designed for 1,000' of fillup. Slurry yield is 1.71 ft³/sx., 13 ppg.

285 sx 50/50 Poz Premium AG w/ .3% total Bentonite (light weight additive), 0.4% Halad®-567 (low fluid loss control), 0.3% D-AIR 3000 (defoamer), 15% Salt (salt) BWOW, 5#/sx Gilsonite (lost circulation additive) and 0.25#/sx Flocele (lost circulation additive).

Production Casing: Cement job is designed for 3,680' of fillup (200' into 9-5/8" intermediate casing.) Slurry yield is 1.47 ft³/sx.

Lead Cement: 350 sx 50/50 Poz Premium foamed w/ N2 to 11 ppg w/ 5#/sx Silicalite Compacted (cement material), 20% SSA-1 (cement material), 0.2% Versaset (thixotropic additive), 0.3% Diacel LWL (low fluid loss control) and 1.05% Zonesealant 2000 (foamer).

Tail Cement: 80 sx 50/50 Poz Premium (unfoamed – 14.3 ppg) w/ 5#/sx Silicalite Compacted (cement material), 20% SSA-1 (cement material), 0.2% Versaset (thixotropic additive) and 0.3% Diacel LWL (low fluid loss control)

4. Mud Program:

Interval	Mud Type and Characteristics
Surface to 1,500'	Fresh water mud, 3.5 ppg
1,500' to 5,620'	Salt saturated mud, max 10.7 ppg
5,620' to 9,100' TD	Fresh water mud, LSND, max 8.9 ppg

Sufficient mud material to maintain mud properties, control loss circulation and contain a blowout will be available at the well site during drilling operations.

5. Formation Evaluation Program:

- A) Cores: none anticipated
B) DST's: none anticipated
C) Mud Log: 1,500' to 9,100' TD
D) Electric Logs:

Dipole Sonic w/ GR
Array Induction w/ GR & Caliper
LithoDensity/Neutron w/ GR & Caliper
Dipmeter
Repeat Formation Tester (20 sets/1 sample)

1,500'-5,620'	5,620'-9,100' TD
Optional	Optional
Yes, GR to surf	Yes
Optional	Yes
Optional	Yes
No	Optional

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Sidewall Cores (approx 20 cores)

No

Optional

6. Pressure Control and Safety Equipment:

A) Type: 13-5/8" double gate hydraulic BOP with 13-5/3" annular preventer. The BOP will be equipped as follows:

- 1) One blind ram (above)
- 2) One pipe ram (below)
- 3) Drilling spool with two side outlets (choke side 3" minimum, kill side 3" minimum).
- 4) 3" diameter choke line
- 5) Two choke line valves (3" minimum)
- 6) Kill line (3" minimum)
- 7) Two chokes with one remotely controlled from the rig floor
- 8) Two kill line valves and a check valve (3" minimum)
- 9) Upper and lower kelly cock valves with handles available
- 10) Safety valves and subs to fit all drill string connections in use
- 11) Inside BOP or float sub available
- 12) Pressure gauge on choke manifold
- 13) Fill-up line above the uppermost preventer

B) BOP Stack Pressure Rating: 5,000 psig, intermediate casing through production string.

C) Testing Procedure:

Annular Preventer

The annular preventer will be pressure tested to 50% of the rated working pressure for a period of ten minutes or until provisions of the test are met, whichever is longer. At a minimum, the pressure test will be performed:

- 1) When the annular is initially installed
- 2) Whenever any seal subject to test pressure is broken
- 3) Following related repairs and at 30 day intervals

The annular preventer will be functionally operated once per week.

Blowout Preventer

The BOP, choke manifold and related equipment will be pressure tested to the approved working pressure of the BOP stack (if isolated from the casing with a test plug) or to 70% of the internal yield of the casing (if the BOP is not isolated from the casing by a test plug). Pressure will be maintained for a period of at least ten minutes or until the requirements of the test are met, whichever is longer. At a minimum the pressure test will be performed:

- 1) When the BOP is initially installed

- 2) Whenever any seal subject to test pressure is broken
- 3) Following related repairs and at 30 day intervals

The pipe and blind rams will be activated each trip, but not more than once each day. All BOP drills will be recorded in the IADC driller's log.

D) Choke Manifold Equipment:

All choke lines will be straight lines unless turns use tee blocks or are targeted with running tees, and will be anchored to prevent whip and vibration.

E) Accumulator:

The accumulator will have sufficient capacity to open the hydraulically controlled gate valve (if so equipped), close all rams plus the annular preventer, and retain a minimum of 200 psig above precharge on the closing manifold without the use of the closing unit pumps. The reservoir capacity will be double the accumulator capacity, and the fluid level will be maintained at the manufacturer's recommendations.

The BOP system will have two independent power sources available for powering the closing unit pumps. Sufficient nitrogen bottles are suitable as a backup power source only, and shall be recharged when the pressure falls below manufacturer's specifications. The accumulator precharge pressure test will be conducted prior to connecting the closing unit to the BOP stack and at least once every six months thereafter. The accumulator pressure will be corrected if the measured precharge pressure is found to be above or below the maximum or minimum limits specified in Onshore Oil & Gas Order Number 2 (only nitrogen gas may be used to precharge).

A valve will be installed in the closing line as close as possible to the annular preventer to act as a locking device. This valve will be maintained in the open position and will be closed only when the power source for the accumulator is inoperative.

Remote controls shall be readily accessible to the driller. Remote controls will be capable of both opening and closing all preventers. Master controls will be at the accumulator and will be capable of opening and closing all preventers and the choke line valve (if so equipped).

The BOP and related pressure control equipment will be installed, tested and maintained in compliance with the specifications in and requirements of Onshore Oil & Gas Order number 2.

The choke manifold and BOP extension rods with hand wheels will be located outside the rig sub structure. The hydraulic BOP closing unit will be located at least twenty-five feet from the well head but readily accessible to the driller. Exact locations and configurations of the hydraulic BOP closing unit will depend upon the particular rig contracted to drill this well.

A flare line will be installed after the choke manifold, extending 125 feet from the center of the drill hole to a separate flare pit.

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F) Pit Alarms & Flow Sensor:

Once surface casing has been set and the BOP nipped up, a flow sensor will be utilized in the flow line and pit level sensors will be used until the well has production casing installed or is P&A'd.

7. Abnormal Conditions:

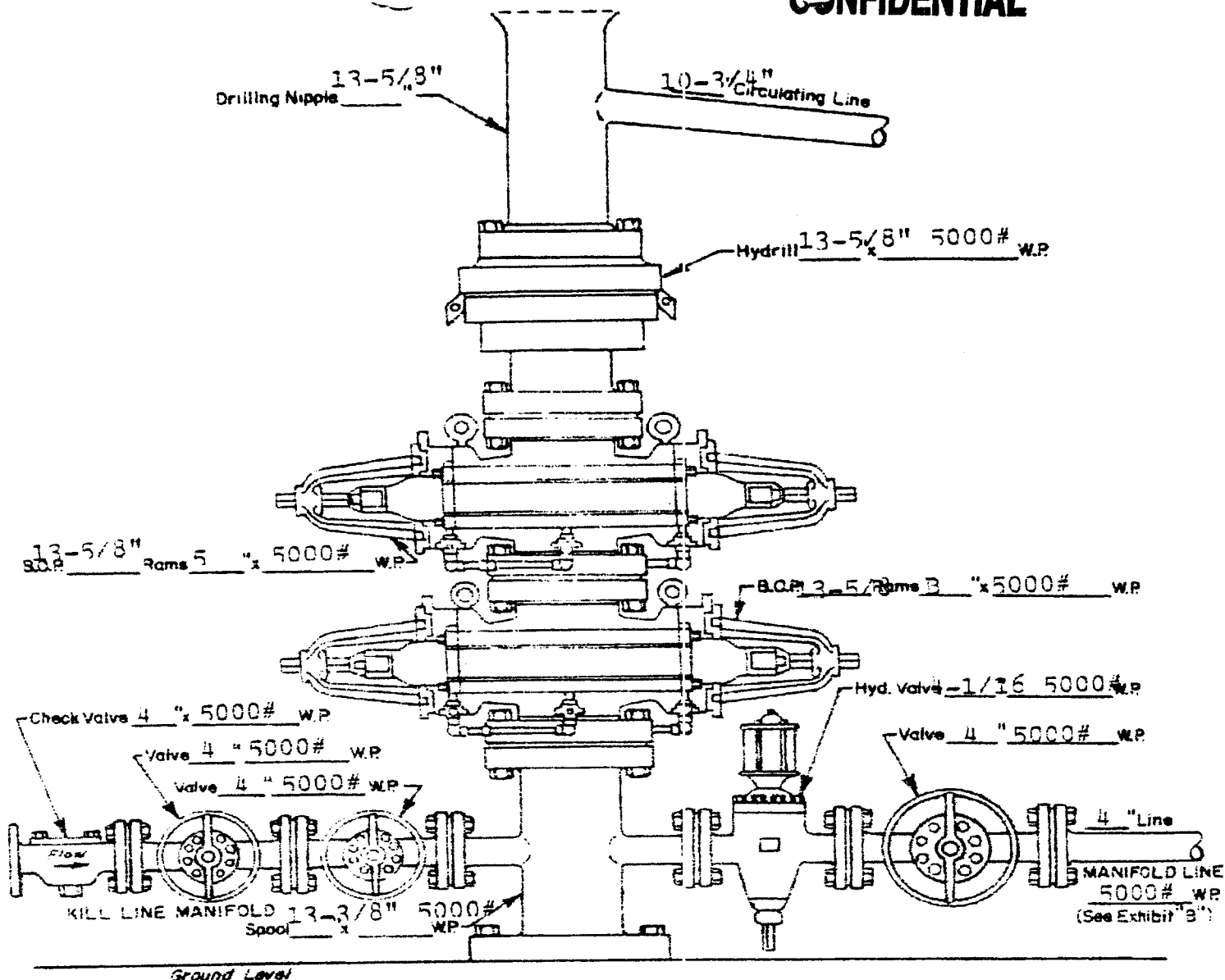
- A. No abnormal temperatures or pressures are anticipated. No H₂S has been encountered in or known to exist from previous wells drilled in the general area. However, a H₂S contingency plan has been attached for the drilling of the Navajo section as a precautionary measure.
- B. The Arapien section is expected to be highly deformed and heterogeneous shales, siltstones, evaporates and salt. Previous experience has shown this to be a difficult interval to drill from a hole stability, fluid loss and pipe sticking standpoint.

8. Anticipated Stating Date:

Anticipated commencement date	May 25, 2004
Drilling days	approximately 60 days
Completion days	approximately 14 days

9. Notification of Operations:

Utah Division of Oil, Gas, and Mining (Salt Lake City)
801-538-5340
United States Bureau of Land Management (Richfield Office)
435-896-1500



WELL HEAD B.O.P.
5000# # W.P.

☐ Manual
☒ Hydraulic

***PROJECT PLAN OF DEVELOPMENT AND
MASTER SURFACE USE PLAN***

Wolverine FEDERAL #17-2

NAME OF APPLICANT: Wolverine Gas and Oil Company of Utah,
LLC
One Riverfront Plaza, 55 Campau NW
Grand Rapids, Michigan 49503-2616

PROJECT NAME: "Wolverine Federal #17-2"
SE/SW of Section 17
Township 23 South – Range 1 West

ATTACHMENTS: A.) Project Map/Survey
B.) Well Site Location Layout
C.) Typical Cross Sections (Cut and Fill)
D.) Wildlife & Vegetative Species of
Concern Summary
E.) H2S Contingency Plan
F.) Cultural Resource Survey Report

I. DESCRIPTION OF PROJECT:

Wolverine Gas and Oil Company of Utah, LLC (Wolverine) proposes to drill and explore for hydrocarbons from the Navajo Formation at depths of approximately 4,810' – 7,036' and approximately 8,062' – 9,100' within the Wolverine Federal Exploration Unit situated in Sevier County, Utah:

TOWNSHIP 23 SOUTH, RANGE 1 WEST

Southeast Quarter of Southwest Quarter (SE/SW) of Section 17

Well Name & No.	Target	Elev.	Location	TD	Footages
-----------------	--------	-------	----------	----	----------

LEASE # UTU-73528					
Wolverine Federal #17-2	Navajo 1 and 2	5,835'	SE SW Sec 7, T23S-R1W	9,100'	869' FSL; 1,901' FWL

The attached Project Map (Attachment A) indicates the proposed well site and its intended configuration. Additionally, the proposed access route is indicated. This well is being drilled within the "Wolverine Federal Exploration Unit" and upon federally owned surface administered by the Bureau of Land Management, United States Department of the Interior.

Mineral rights within the Wolverine Federal Exploration Unit are owned by a variety of interests and are federally owned at the target bottom-hole location for this proposed well. The proposed surface plan will be reviewed and inspected by the appropriate regulatory agencies, state and federal, to ensure proper utilization of the surface reflecting an effort by Wolverine to minimize surface disturbance and waste. Appropriate Onshore Oil and Gas Orders and those of the Utah Division of Oil, Gas and Mining will be followed in the constructing, drilling, completion, operation, plugging and surface reclamation of this well.

The project is situated within an area that is referred to by the Utah Division of Oil, Gas and Mining (Statement of Basis, Kings Meadow Ranches 17-1, October 21, 2003) as "... placed in the High Plateaus section of the Colorado Plateau physiographic province in western central Utah. Some people have characterized this area as being in the Basin and Range – Colorado Plateau transition zone." The drill site itself is located in a flat area between steep hills and is contiguous to Highway 24 from which access to this site will be established. The flat area is dominated by sagebrush – grass communities and the nearby hillsides are dominated by Pinyon Pine – Juniper communities. The access route will consist of an improved driveway off from Highway 24 entering onto the well site. BLM road construction standards will be adhered to as new improvements are constructed.

Wolverine's proposed "Wolverine Federal #17-2" project is most easily accessible from Sigurd, Utah. From Sigurd, one would drive down Highway 24 heading east/southeasterly. At mile marker 14, drive approximately 0.2 miles and turn westerly onto the access road heading onto the well site. Drive approximately 100 yards to the proposed well pad location.

Surface water is located in the area primarily in the form of the Sevier River, in the Peterson Creek drainage, a tributary of Brine Creek. Local springs arising from the volcanic rocks and ephemeral drainages also exist in the area including a drainage way

situated along Highway 24. The Sevier River is approximately three (3) miles west of this proposed location.

Geology and Soil Types

Again quoting from the "Division of Oil, Gas and Mining, Statement of Basis, Kings Meadow Ranches 17-1", the well "...will likely spud into a thin alluvium covering the evaporate-rich Jurassic age Arapien shale." "The Arapien Shale may have been somewhat intruded or elevated into the area between the Sevier Fault and the considerable parallel secondary faulting mapped in the Cedar Mountain - Black Mountain area..." It is anticipated that from surface to approximately 400 feet in depth, the lithology of the Quaternary will consist of unconsolidated sediments.

The soil type classified at the Wolverine Federal #17-2 wellsite is the Billings silty clay loam. This soil type is a fine-silty, mixed calcareous, mesic Typic Torrifluvents and is usually found in areas containing two (2) to five (5) percent slopes. The soil is a deep, drained, silty clay loam. It features a light gray, moderately alkaline, strongly calcareous, silty clay loam surface soil that is approximately ten (10) inches thick. The subsoils consist of a light gray, moderately alkaline, friable, silty clay loam approximately 32 inches thick. The substrate material is a light gray, moderately alkaline, friable, silty clay loam with a small amount of gypsum veining.

Assuming that the drilling and completion of this well results in its ability to commercially produce hydrocarbons, appropriate market connections will be made upon proper permitting of such activities by all agencies having jurisdiction over said activities.

II. SOIL EROSION CONTROL MEASURES:

The well pad will be sloped at about 1%, in the direction of the site's drainage so as to provide for a well-drained work area during drilling operations. Appropriate collection and infiltration basins will be constructed in the sloped area of the drill pad.

In all fill areas, the edges shall be diked to control run off.

Appropriate drill site drainage and sedimentation control measures will be incorporated in the operational plan. These may include utilization of earthen dikes along the fill portion of the drilling pad perimeter, stabilization of slopes as needed, location of the reserve pits in the cut portion of the drilling pad and the pad constructed so as to slope toward a collection and infiltration basin. Construction of the drill site shall be in accordance with the regulations and stipulations as defined by the State of Utah, Department of Natural Resources, Division of Water Rights.

Reclamation of the site will be in accordance with Best Management Practices and requirements of the Bureau of Land Management.

III. PROPOSED ACCESS ROADS AND ROAD IMPROVEMENTS

The proposed new access road that is to be constructed is identified and labeled on the project map. Steep, rough topography is not identified as a problem along our access route which will be constructed by initially using fill material and covering it with approximately eight (8) inches of shale/gravel. Another layer of road base material, approximately four (4) inches in depth, will be placed on top of the shale/gravel.

IV. LOCATION OF EXISTING WELLS

The recently drilled "King Meadow Ranches 17-1" well is situated approximately one-half mile northerly of this proposed well site location and is situated in the Southeast Quarter of the Northwest Quarter (SE/NW) of Section 17, Township 23 South, Range 10 West, Sevier County, Utah.

V. LOCATION AND TYPE OF WATER SUPPLY

Water for drilling the Wolverine Federal #17-2, will be purchased from water wells nearby or drilled on location and pumped into storage tanks at the site. Water for drilling from nearby well(s) will be hauled to location and stored in storage tanks on the drill site. Wastewater will not be discharged on the surface at this site and the drilling of the well will not require a wastewater management plan.

VI. CONSTRUCTION MATERIALS

In most circumstances, natural earth materials will be used for the construction of roads and fills. These will be taken from locations essentially contiguous to or nearby the locations to be improved. When necessary, road base materials will be used and delivered by the contractor for application on site and specifically as the initial fill material for the access road is then covered with approximately eight (8) inches of shale/gravel.

VII. METHODS FOR HANDLING WASTE

The Reserve Pit will be dug on the well pad per the attached Well Site Location Layout (Attachment B). It will be used for the disposal of waste mud and drill cuttings and will be located on the west/southwesterly portion of the well site plan. The pit will be 125 feet X 225 feet and will be 10 feet deep. The pit will be lined with a synthetic liner having a minimum thickness of 12 mills and if the reserve pit is built in rock, geotextile or some other material approved by the Division of Oil, Gas and Mining shall be utilized. The Division of Oil, Gas and Mining shall be notified prior to lining the reserve pit in order to allow for Division inspection. Rules pursuant to R649-3-16 will be followed regarding

the reserve pit as well as those governing Onshore Oil and Gas Operations (43 CFR 3160.)

Upon evaporation of fluids, pit closure occurs with the back fill of soil and its compaction to prevent settling. The usage of the pit is further described in the section VIII under pit closure.

All garbage will be taken off site and disposed of properly. Pursuant to R649-3-14, all rubbish and debris shall be kept in containers on the well site, and will be hauled to an approved disposal site upon completion of drilling and completion operations and as needed during such operations. There will be no chemical disposal of any type. Sewage is handled through the renting of portable toilets. These are serviced by the rental company and removed from site when no longer required.

VIII. PLANS FOR RECLAMATION OF THE SURFACE

Pit closure: The pits will be fenced on three sides during all drilling operations and then the fourth side will be immediately fenced when the rig is moved off location. After evaporation of fluids, back-fill of sub-soil and compaction to prevent settling will occur within 90 days of the drilling and completing of the well. If necessary after 90 days, the fluids will be sucked out of the pit and transported off site.

The topsoil will be stripped off and stock piled in an area not to be disturbed. The topsoil will be placed back on the pit after back filling and then prepped for re-seeding.

The approximate Pit size is indicated on the Well Site Location Layout diagram attached hereto (Attachment B).

Revegetation Methods: Disturbed areas will be disked, seeded and "dragged", as needed; seeding with a mixture approved by the local USDA Natural Resource Conservation Service or the Bureau of Land Management.

Wolverine generally requires at least twelve (12) pounds per acre of seed distribution. Wolverine suggests that autumn seeding practices be used due to the terrain in this project area. Spring rain events are common and tend to cause severe run-off. Fall seeding will allow any moisture, whether rain or snow, to assist the seed into the ground.

Other Practices: Other practices that will be utilized to reclaim disturbed areas will include riprap when and if necessary to prevent erosion and the installation of silt fencing in sensitive and/or erosive areas.

Timetable: Reclamation of the surface will commence as soon thereafter construction, drilling and well completion are concluded, as is practicable, depending on

weather. In the event of a dry hole, the drill site and roadways will be restored to their original condition as nearly as practicable within 180 days after plugging date of the well.

IX. SURFACE OWNERSHIP

The surface of the proposed well site is federally owned and is administered by the Bureau of Land Management, United States Department of Interior.

X. WELLSITE LAYOUT

Please see the attached "Well Site Location Layout" (Attachment B) for the well configurations.

XI. PIPELINES AND STREAM CROSSINGS

PIPELINES: In the event of hydrocarbon production requiring transmission by pipeline, the proposed pipeline(s) will be designed, constructed, tested, operated and maintained in accordance with standard safety practices and by a combination of construction techniques intended to minimize to the greatest extent practical the impacts upon natural resources.

Pipelines will typically be installed by trenching. In these trenched areas, the contractor shall strip and stockpile topsoil to be replaced over the backfill upon completion of construction operations. Silt fencing will be installed at all stream crossings.

The proposed pipelines will be constructed with a combination of methods intended to minimize impacts to private, state and federally owned property, county roads and natural resources. The pipeline will be constructed by a combination of conventional construction techniques and special measures designed to minimize impacts to natural resources. Pipelines will be adequately compacted before the topsoil is replaced for re-seeding.

In general and where required, soil erosion control measures will consist of appropriate BMPs (Best Management Practices) to reduce the potential for erosion. The BMPs that will be utilized in upland areas include use of construction barriers where appropriate, land clearing, spoil piles, staging and scheduling, seeding and mulching. Note that spoil piles will not typically be seeded since exposure of the spoil piles should be minimal in time. All other proper BMP measures will be implemented to reduce the potential for erosion. Seeding of all raw soils after burial of pipe will be performed. However, mulching will be performed only within state or county road right-of-ways.

Generally speaking, in wetlands, appropriate BMPs will be implemented to minimize the potential for soil erosion within wetland construction zones. These measures shall include, but not be limited to, clearing, barriers, staging, filters, silt fencing, spoil piles, dewatering, seeding, and mulching.

XII. GENERAL

TIMELINE: The following is a general order of construction and sequence of earth change by which our operations will proceed:

- 1.) Access Road and Well Pad Construction
- 2.) Drilling and Well Completion Operations
- 3.) Initial Well Pad Restoration
- 4.) Clearing of Pipeline Rights-of-way (if needed)
- 5.) Delivery and Layout of Pipe
- 6.) Pipe Welding and Inspection
- 7.) Trenching of Pipe
- 8.) Placement and Burying of Pipe
- 9.) Final Restoration of Site/Access/Pipeline Route
- 10.) Re-Seeding

All hillsides, creek banks, and other places where contractor has moved earth to facilitate operations shall be restored to as near original condition as practical. Replaced material and/or backfill will be protected from erosion to the satisfaction of Wolverine, the Bureau of Land Management and the Utah Division of Oil, Gas and Mining without undue delay.

Upon completion of any backfill, contractor shall clear pipeline rights-of-way and access routes of large rocks, stumps and other debris; fill holes, ruts and depressions, and shall keep the access road in a neat and acceptable condition. All cleanup shall be maintained by the contractor until final acceptance by Wolverine and the enforcing agency.

XIII. ENVIRONMENTAL IMPACT ASSESSMENT:

It is anticipated that the drilling and operations planned, provided the success of this well, will not have any adverse affects to any wildlife or aquatic life in the area. There will be only a minor effect on the surface cover. Drilling and production operations should have minimal effect on the population patterns, land use, public utilities or public services in the near future for this rural area.

Noise levels during drilling and completion operations may be continuous but not unusually high. If production is achieved, noise levels should be minimal during the operation and maintenance of the wells. Necessary soil erosion and sedimentation safeguards will be built into the well pad, access and future proposed pipeline routes to protect any nearby lowlands, where appropriate. Particular care will be exercised in order that all drain ditches be maintained and kept unobstructed to prevent water backup against spoil banks or backfill, causing erosion. The cumulative long-term effect on the immediate environment should be minimal.

If the well is productive, the effect on the air quality in the area is expected to be practically non-existent. Human activity in this area is somewhat limited, due to the nature of the location. Ranching operations and any activities in the area should not be adversely affected.

The site will then be contoured as closely as practical to its natural state, fine graded and stabilized. The well site and access route will be restored as soon as practical. If a well is productive, existing dikes will be maintained and erosion control procedures, as specified and required by the Bureau of Land Management, will be followed to insure protection of the local ecosystem.

Cultural

A Class III cultural resource evaluation has been ordered by Wolverine and will supplement this application package as soon as weather and surface conditions permit the survey and its resulting report. This supplement shall be considered "Attachment G."

Wildlife

Please see "Attachment D", a summary of Wildlife and Vegetative Species of Concern.

H2S Contingency Plan

Please see "Attachment E", H2S Contingency Plan.

XIV. SUMMARY:

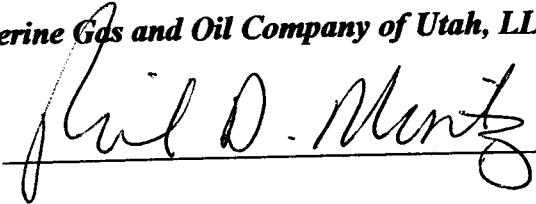
In conclusion, the environmental impact of this project is considered to be minimal and every effort will be made to ensure the protection and preservation of the environment, as well as the standard of living for those affected by its operation.

This proposed project is aimed at increasing the hydrocarbon reserves within the State of Utah. In addition, in the event that production can be established in this project, it will be of financial benefit to the private holders of oil and gas rights within the "Wolverine Federal Exploration Unit", including the Bureau of Land Management in fulfillment of its stewardship responsibilities over federally owned oil and gas assets. We consider the environmental impact of this project to be slight and we will make every effort to be conscientious operators and to insure protection and preservation of the environment during the course of our drilling and producing operations.

Sincerely,

Wolverine Gas and Oil Company of Utah, LLC

By:



Authorized Permitting Agent:

Western Land Services – Western Division
54 West Seymour Street
Sheridan, WY 82801
Donald L. Anderson, Chief Operating Officer
Phone: 307-673-1817
Local Contact: Shawn Burd
Cellular Phone: 307-751-5156

H₂S Contingency Plan

for

Wolverine Federal #17-2

Township 23S, Range 1W

Section 17

Sevier County, Utah

Wolverine Gas & Oil of Utah, LLC

One Riverfront Plaza

55 Campau NW

Grand Rapids, MI 49503

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Introduction

It is the policy of Wolverine Gas & Oil of Utah, LLC to provide a safe and healthful work environment for all of its employees as well as contractors that may work on Wolverine Leases. Wolverine Gas & Oil of Utah, LLC makes a continued effort to comply with laws and regulations relative to worker safety and health, and to manage all operations in a manner to reduce risk.

The following is a H₂S contingency plan for the Wolverine Federal #17-2 well. It is designed for personnel working on this project to follow in case of an accidental release of hydrogen sulfide during drilling and or completion operations. For the plan to be effective, all personnel must review and be familiar with onsite duties as well as the safety equipment involved.

The purpose of this plan is to act as a guideline for personnel working on the wellsite in the event of a sudden release of hydrogen sulfide. All personnel working on the wellsite as well as service personnel that may travel to location on an unscheduled basis must be familiar with this program. The cooperation and participation of all personnel involved with the drilling operation is necessary for this plan to be effective.

I. Responsibilities and Duties

In order to assure proper execution of the contingency plan, it is essential that one person be responsible for and in complete charge of implementing the procedures outlined in this plan. The order of Responsibility will be as follows:

1. Wolverine Gas & Oil Of Utah, LLC drilling representative on location - if unable to perform his / her duties
2. Alternate Wolverine Gas & Oil Of Utah, LLC representative - if unable to perform his / her duties
3. Rig Toolpusher / Supervisor - if unable to perform his / her duties
4. Safety consultant representative - if available

A. All Personnel

1. Always be alert for possible H₂S alarms - both audible and visual.
2. Be familiar with location of Safe Briefing Areas (SBA) and protective breathing equipment.
3. Develop a "wind awareness". Be aware of prevailing wind direction as well as nearby uphill areas, should there be no wind.
4. Familiarize yourself with nearest escape routes for safe evacuation
5. Should H₂S alarms sound, DON'T PANIC - Remain calm and follow instructions of person in charge.
6. If the H₂S alarms sound:
 - a. Essential personnel shall don the appropriate respiratory protective equipment and follow company procedures. Essential personnel will continue to wear respiratory protective equipment until the area is deemed safe (H₂S concentration less than 10 PPM)
 - b. Non-essential personnel shall evacuate to the appropriate safe briefing area using escape breathing systems. Wait there for further instructions from Wolverine drilling representative.

- c. Initiate rescue protocol if necessary - following training procedures.

B. Drilling Foreman

1. The Wolverine drilling foreman will confirm that all personnel on location are trained in H₂S safety and aware of above list of duties when the H₂S plan becomes effective at drill out of intermediate casing shoe above the Navajo Formation.
2. The Wolverine foreman will ensure that all safety and emergency procedures are observed by all personnel.
3. The Wolverine foreman will make an effort to keep the number of personnel on location to a minimum and to ensure that only essential personnel are on location during critical operations.
4. Should any extreme danger condition exist, the Wolverine foreman will:
 - a. Assess the situation and advise all personnel by appropriate means of communication.
 - b. Be responsible for determining that the extreme danger condition is warranted and the red flag shall be posted at location entrance.
 - c. Go to safe briefing area and give clear instructions relative to hazard on location, and actions for personnel to follow.
 - d. Notify company and regulatory groups of current situation as outlined in company protocol.
 - e. Proceed to rig floor and supervise operations with rig supervisor. Take action to control and reduce the H₂S hazard.
 - f. Ensure that essential personnel are properly protected with supplied air breathing equipment and that non-essential personnel are in a "poison gas free" area.
 - g. Be responsible for authorizing evacuation of persons / residents in area surrounding the drilling location.
 - h. Commence any ignition procedures if ignition criteria are met.

C. Rig Supervisor - Toolpusher

1. If the Wolverine drilling foreman is unable to perform his / her duties, and the alternate drilling foreman is also unable or unavailable to perform his / her duties, the drilling rig Toolpusher will assume command of wellsite operations and all responsibilities listed above for drilling foreman.
2. Ensure that all rig personnel are properly trained to work in H₂S environment and fully understand purpose of H₂S alarms and actions to take when alarms activate. Ensure that all crew personnel understand the buddy system, safe briefing areas, and individual duties as well as emergency evacuation procedures.
3. Should an extreme danger operational condition arise, the rig Toolpusher shall assist the Wolverine foreman by:
 - a. Proceeding to the rig floor and assist in supervising rig operations.
 - b. Ensure that only essential working personnel remain in hazardous areas.
 - c. Ensure that all crew members that remain in hazardous area wear respiratory protective equipment until notified that area is "clear" of any toxic gases.
 - d. Assign rig crew member or other service representative to block entrance to location. No unauthorized personnel will be allowed entry to location.
 - e. Help to determine hazardous "danger zones" on location using portable detection equipment and position electric fans to move gas in any high concentration areas.

D. Safety Consultant

1. During normal operations (no H₂S present), the safety consultant will be responsible for the following:
 - a. Ensure that all wellsite safety equipment is in place and operational.

- b. Ensure that all wellsite personnel are familiar with location safety layout and operation of all safety equipment.
 - c. Assist the Wolverine foreman in performing weekly H₂S drills for location personnel.
- 2. When an operational condition is classified as extreme danger, the safety consultant will be responsible for the following:
 - a. Account for all wellsite personnel
 - b. Assess any injuries and direct first aid measure.
 - c. Ensure that all safety and monitoring equipment is functioning properly and available.
 - d. Monitor the safety of wellsite personnel
 - e. Maintain a close communication with Wolverine foreman.
 - f. Be prepared to assist Wolverine foreman with support for rig crew or other personnel using breathing equipment.
 - g. Be prepared to assist Wolverine foreman with emergency procedures including possible well ignition.
 - h. Be prepared to assist with evacuation of any area residents or other personnel working in the immediate area.

II. Drilling Rig Layout

A. Location

1. All respiratory protective equipment and H₂S detection equipment will be rigged up prior to drilling out intermediate casing and entering the first zone suspected to contain hydrogen sulfide. The rig crews and other service personnel will be trained at this time.
2. The drilling rig will be situated on location to allow for the prevailing winds to blow across the rig toward the circulation tanks or at right angles to the lines from the BOP to the circulation tanks.
3. The entrance to the location is designed so that it can be barricaded if a hydrogen sulfide emergency condition arises. An auxiliary exit route

will be available so that in case of an emergency, a shift in wind direction would not prevent escape from the location.

4. A minimum of 2 safe briefing areas (SBA) shall be designated for assembly of personnel during emergency conditions. These will be located at least 150 ft. or as practical, from the wellbore and in such a location that at least one area will be upwind of the well at all times. Upon recognition of an emergency situation, all personnel will be trained to assemble at the designated briefing area for instructions.
5. Smoking areas will be established and "No Smoking" signs will be posted around the location.
6. Reliable 24 hour radio and telephone communications will be available at the drilling foremen's office.
7. A mud-gas separator will be rigged up and manifolded to the choke system.
8. All equipment that might come into contact with hydrogen sulfide - drill pipe, drill stem test tools, blowout preventers, casing, and choke system will meet Wolverine's metallurgy requirements for H₂S service.
9. The drilling rig will have a continuous electronic H₂S detection system that automatically will activate visible and audible alarms if hydrogen sulfide is detected. The visible light will activate if 10 PPM H₂S is present. The audible siren will activate if 15 PPM or higher concentration is present. There will be at least 4 H₂S sensors in place on the drilling rig. They will be located to detect the presence of hydrogen sulfide in areas where it is most likely to come to surface. The sensor head locations will be: 1) rig floor by driller's console, 2) substructure area near the bell nipple, 3) the shale shaker, 4) the mud mixing area. Additional sensors will be positioned at the discretion of the drilling foreman. At least 1 light and 1 siren will be placed on the rig to indicate the presence of hydrogen sulfide. The light and siren will be strategically placed to be visible to all personnel on the drill site. Additional alarm lights & sirens may be added to ensure that all personnel on the drill site are able to notice the alarms at any time.
10. The H₂S detection equipment will be calibrated as recommended by the manufacturer. Calibration records will be maintained on location.
11. At least 4 windsocks will be placed around the drill site to ensure that everyone on the drilling location can readily determine wind direction.

One windsock will be mounted on or near the rig floor to be readily visible to rig crews when tripping pipe.

12. All respiratory protective equipment will be NIOSH/MSHA approved positive pressure type and maintained according to manufacturer's guidelines. All breathing air used for this equipment will be CGA type Grade D breathing air. Battery powered voice mikes will be available for communication when wearing masks.
13. Both 30 minute self-contained breathing apparatuses (SCBA) and workline units with escape cylinders will be available on location. There will be sufficient numbers of this supplied air breathing equipment on location to ensure that all personnel on location have 1 piece of equipment available to them. All Respiratory protective equipment will use nose cups to prevent fogging in temperatures below 32 F. Spectacle kits will be available for personnel that require corrective lenses when working under mask.
14. Electric explosion-proof ventilating fans (bug blowers) will be available to provide air movement in enclosed areas where gas might accumulate.
15. H₂S drills will be conducted at least weekly to ensure that all well site personnel are competent in emergency donning procedures. These drills will be recorded in the driller's log.

Safety Procedures

A. Training

All personnel who come onto the drilling location must be properly trained in hydrogen sulfide, nitrogen, and oxygen deficient atmospheres safety. The personnel shall carry documentation with them indicating that the training has occurred within the previous 12 months.

Training topics shall include at a minimum:

1. Hazards and characteristics of hydrogen sulfide, nitrogen, and oxygen deficient atmospheres and symptoms of exposure to these gases.
2. Proper use, care and limitations of respiratory protective equipment with hands on practice.
3. Use of both fixed and portable toxic gas detection equipment.

4. Work practices to reduce opportunities for toxic gas exposure as well as confined space procedures.
5. First aid for toxic gas exposure and resuscitation equipment.
6. The buddy system
7. Emergency evacuation procedures
8. A review of the contingency plan for the well.

B. Operating Conditions

A three color flag warning system will be used to notify personnel approaching the drill site as to operating conditions on the wellsite. This system is in compliance with BLM O.O. #6 and follows industry standards.

Green Flag - Potential Danger

Yellow Flag - Moderate Danger

Red Flag - Extreme Danger - Do Not approach if red flag is flying.

C. Evacuation Plan

There are three residential locations within a one mile radius of the well site. Ron Dastrup lives approximately 3/4 mile northwest of the well location. Mack Dastrup lives approximately one mile southeast of the well location. Kenneth Dastrup also lives approximately one mile southeast of the well location. In the event of an emergency requiring evacuation, the Dastrups would be notified by Wolverine's drilling foreman and given specific directions as to how to evacuate, with due consideration to the wind at the time and other factors. Should a telephonic notification to Mr. Dastrup not be successful in reaching him, one of the non-critical rig personnel will be sent to his home to insure he can be evacuated to safety. The Dastrup's contact information is:

Ron and Virginia Dastrup
P.O. Box 57011
Sigurd, UT 84657
(435) 896-7259

Mack Dastrup
600 King's Meadow
Sigurd, UT 84657
(435) 896-5206

Kenneth Dastrup
500 North King's Meadow
Sigurd, UT 84657
(435) 896-8759

D. Emergency Rescue Procedures

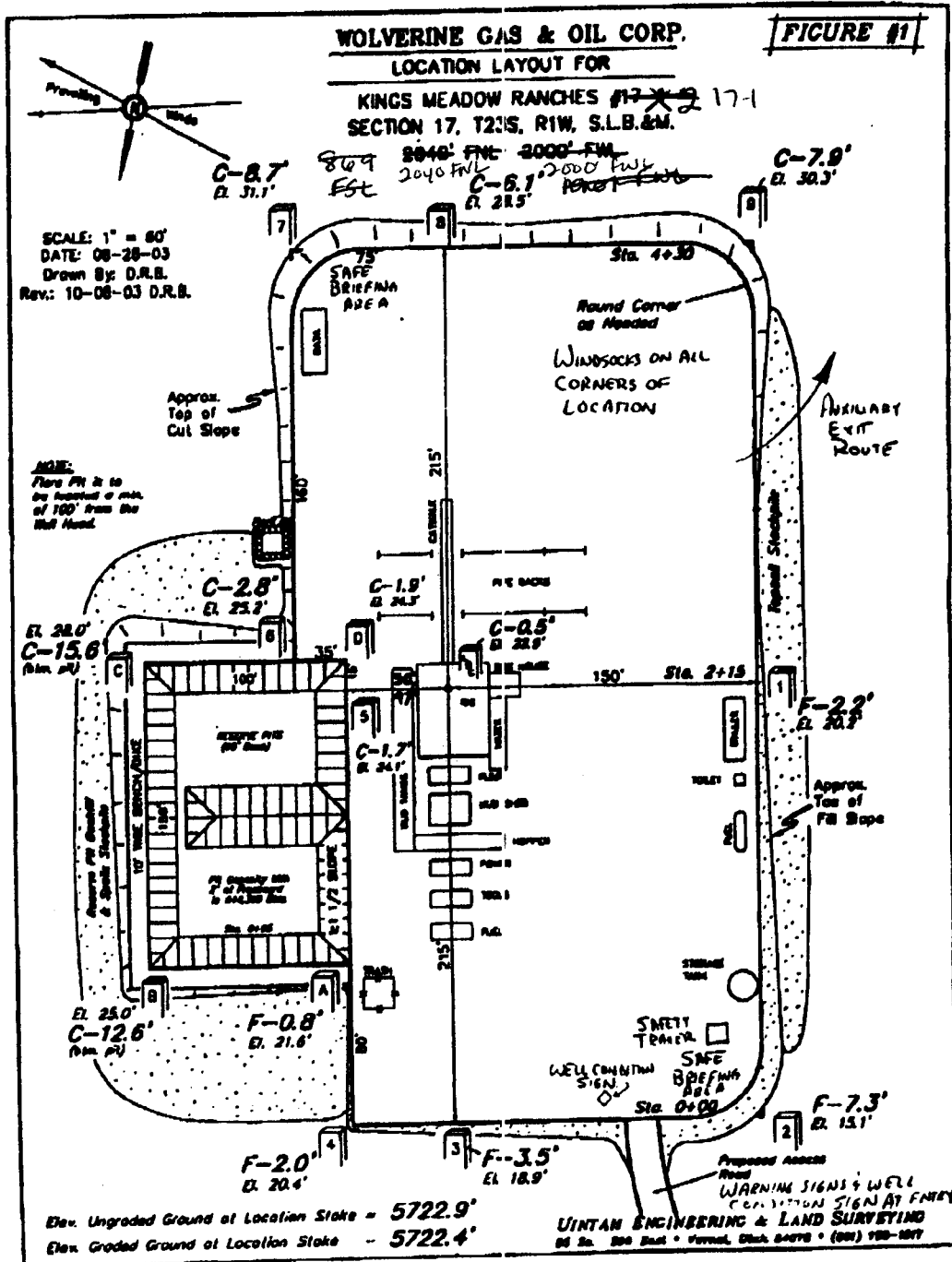
Wellsite personnel should not attempt emergency rescues unless they have been properly trained. A trained person who discovers another person overcome by hydrogen sulfide should **not attempt to rescue without donning the proper breathing equipment**. When making an emergency rescue always use the following procedures:

1. Don rescue breathing equipment before attempting to rescue someone.
2. Remove the victim from the contaminated area to an area free of toxic gas by traveling upwind or cross wind. Be certain that you are in a safe area before removing your breathing equipment.
3. If the victim is not breathing, initiate mouth - to - mouth resuscitation immediately. Follow CPR guidelines and replace mouth to mouth with a bag mask resuscitator if available.
4. Treat the victim for shock, keeping the victim warm and calm. Never leave the victim alone.
5. Any personnel who experience hydrogen sulfide exposure must be taken to a hospital for examination and their supervisor notified of the incident.
6. Their supervisor shall follow the company Emergency Preparedness plan.

IV. H₂S Safety Equipment on Drilling Location

Item	Amount	Description
1.	One (1)	safety trailer with a cascade system of 10-300 cu. ft bottles of compressed breathing air complete with high pressure regulators
2.	At least 1000 ft.	low pressure airline equipped with Hansen locking fittings. This airline will be rigged up with manifolds to supply breathing air to the rig floor, substructure, derrick, shale shaker area, and mud mixing areas. Three high pressure refill hoses will be attached to cascade systems for cylinder refill.
3.	Twelve (12)	Scott 30 minute self contained breathing apparatuses (SCBA)
4.	Twelve (12)	Scott airline units with emergency escape cylinders.
5.	One (1)	4 - channel continuous electronic H ₂ S monitor with audible and visual alarms. The set points for these alarms are 10 PPM for the low alarm and 15 PPM for the high alarm.
6.	Two (2)	Sensidyne portable hand operated pump type detection units with tubes for hydrogen sulfide and sulfur dioxide.
7.	One (1)	oxygen resuscitator with spare oxygen cylinder.
8.	One (1)	trauma first aid kit
9.	One (1)	stokes stretcher and one (1) KED.
10.	Four (4)	wind socks
11.	At least one (1)	well condition sign with 3 flag system
12.	Two (2)	Safe Briefing Area (SBA) signs
13.	One (1)	fire blanket

- | | | |
|-----|-----------|---|
| 14. | One (1) | set air splints |
| 15. | Two (2) | electric explosion proof fans |
| 16. | One (1) | bullhorn and chalk board |
| 17. | Three (3) | 300 cu. ft. air bottles for the safe briefing area. |
| 18. | Two (2) | 30 # fire extinguishers |
| 19. | Six (6) | battery powered voice mikes for communication when wearing air masks. |
| 20. | One (1) | battery powered combustible gas meter |



V. Well Ignition Procedures

If it should become apparent that an uncontrolled release of hydrogen sulfide to the atmosphere may endanger the health and safety of the public or well site personnel, the Wolverine drilling foreman will make a decision to ignite the well. The following procedure should be followed before attempting to ignite the well.

A. Ignition Equipment - the following equipment will be available on-site for use by the ignition team.

1. 2 12-gauge flare guns with flare shells
2. 2 500 ft. fire resistant retrieval ropes
3. 1 portable combustible gas meter
4. Self contained breathing apparatus (SCBA) for each member of the ignition team.
5. 1 backup vehicle with communications equipment

B. Ignition Procedures

1. The Wolverine drilling foreman will ensure that well site personnel are evacuated to a safe area upwind of the well bore prior to any ignition action.
2. The Wolverine foreman and a designated partner "buddy" backed up by well site safety personnel will comprise the ignition team. All team members will be wearing 30 minute SCBAs.
3. The backup crew will be positioned near a radio equipped vehicle at a safe distance from the sour gas release. They will standby to rescue the actual team igniting the well.
4. The partner of the ignition team will carry a combustible gas / hydrogen sulfide meter to continuously monitor the area in which they are working and define the perimeter of the gas cloud.
5. The Wolverine foreman will carry the flare gun and shells.

6. The ignition team will determine the hazardous area and establish safe working perimeters. Once this is identified the team will proceed upwind of the leak and fire into the area with flare gun. If trouble is encountered in trying to light the leak, retry to ignite by firing the flare shells at 45 and 90 degree angles to the gas source, but DO NOT approach closer to the leak.
7. After ignition, monitor for sulfur dioxide and work with the support group to restrict access to the contaminated area.

VI. Residents - Public in Radius of Exposure

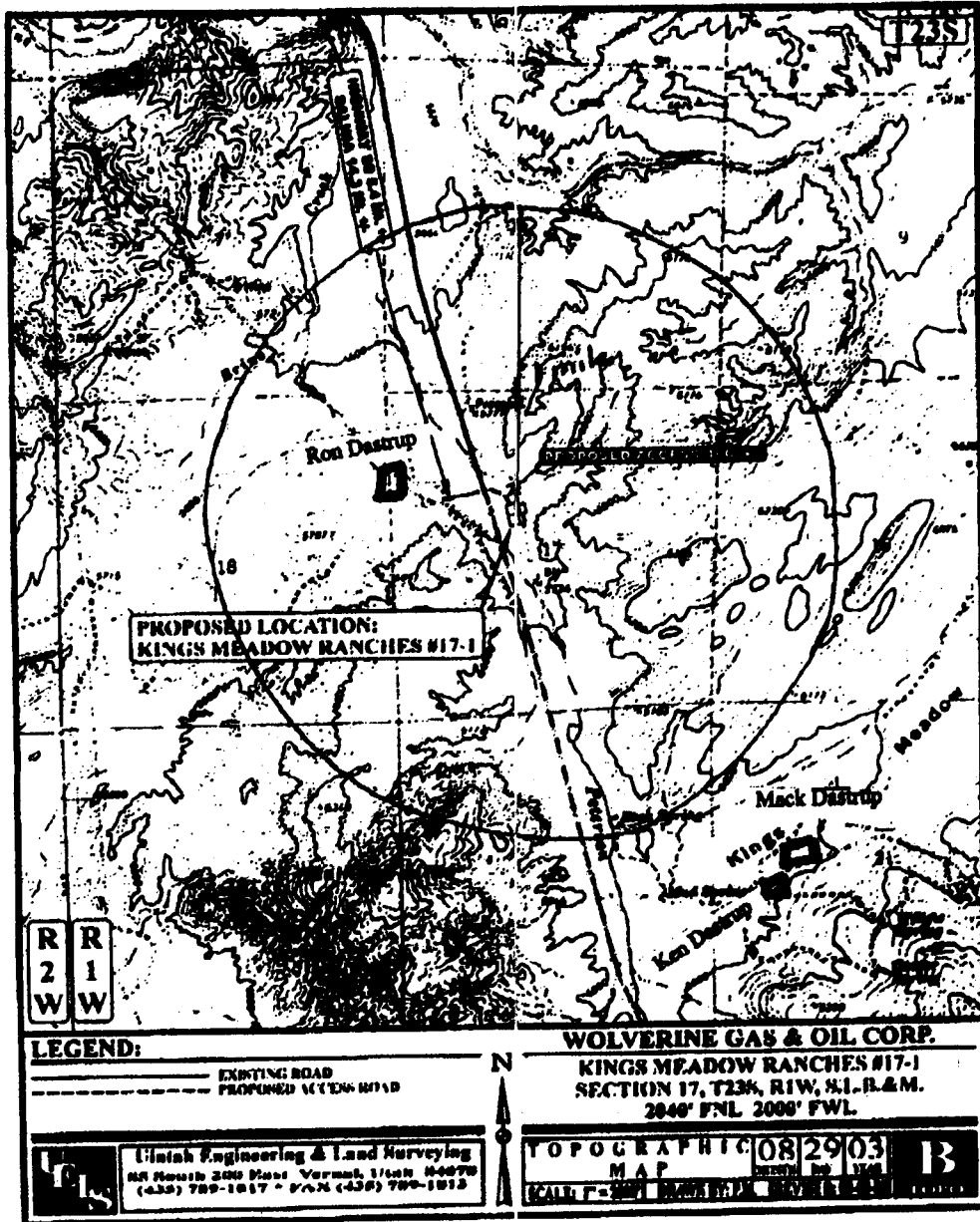
There are three residential locations within a one mile radius of the well site. Ron Dastrup lives approximately 3/4 mile northwest of the well location. Mack Dastrup lives approximately one mile southeast of the well location. Kenneth Dastrup also lives approximately one mile southeast of the well location. In the event of an emergency requiring evacuation, the Dastrups would be notified by Wolverine's drilling foreman and given specific directions as to how to evacuate, with due consideration to the wind at the time and other factors. Should a telephonic notification to Mr. Dastrup not be successful in reaching him, one of the non-critical rig personnel will be sent to his home to insure he can be evacuated to safety. The Dastrup's contact information is:

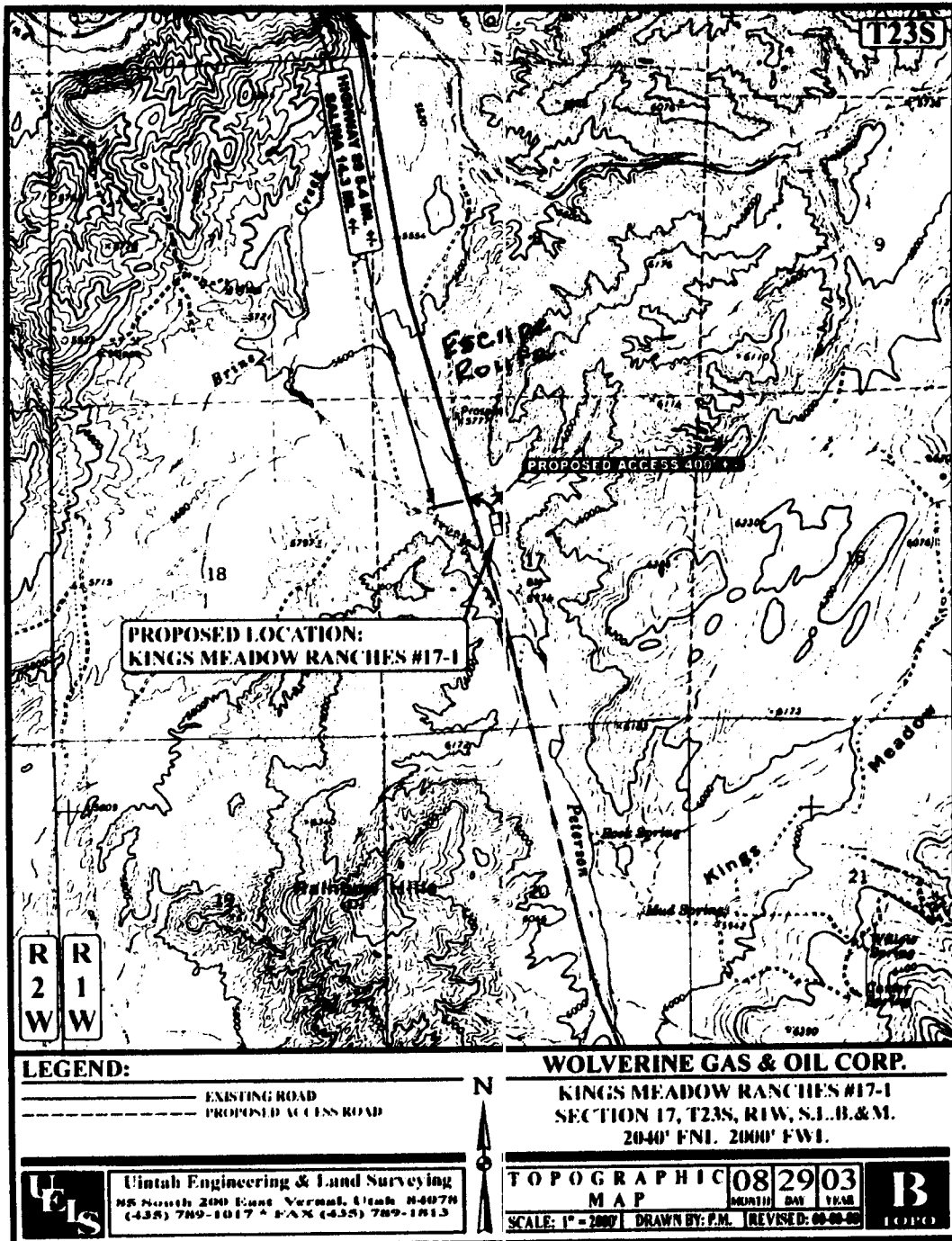
Ron and Virginia Dastrup
P.O. Box 57011
Sigurd, UT 84657
(435) 896-7259

Mack Dastrup
600 King's Meadow
Sigurd, UT 84657
(435) 896-5206

Kenneth Dastrup
500 North King's Meadow
Sigurd, UT 84657
(435) 896-8759

Wolverine Gas & Oil of Utah, LLC operates one other well within a one mile radius; the Kings Meadow Ranches #17-1, situated in the SE/NW of Section 17, Township 23 South – Range 10 West.





VII. Emergency Phone Directory

A. Wolverine Gas & Oil Of Utah, LLC
 One Riverfront Plaza
 55 Campau NW
 Grand Rapids, MI 49503-2616
 616-458-1150

<u>Title</u>	<u>Name</u>	<u>Phone</u>
Wolverine Gas and Oil of Utah Drilling Supervisor	Pat Clark	M (307) 259-6261
Unit Drilling Drilling Superintendent	To be determined	
Wolverine Gas and Oil of Utah Manager of Engineering	Tim Brock	O (517) 676-7023 M (517) 242-6588

B. Emergency Services Phone List

1. Sevier Valley Medical Center - Richfield, UT435-896-8271
2. Ambulance Services - Sevier County, UT911
3. Sheriff Department - Sevier County, UT435-896-2600
4. Highway Patrol - Utah800-222-0038
5. Fire Department - Richfield, UT435-896-5479
6. Utah Division Oil & Gas - Salt Lake City, UT801-538-5277
7. Medical Helicopter - Air Med- Salt Lake City, UT800-453-0120

VIII. Properties of Gas

If gas should be produced, it could be a mixture of Carbon Dioxide, Hydrogen Sulfide, and Methane.

TOXICITY OF VARIOUS GASES

Common Name	Chemical Formula	Specific Gravity (Air = 1)	1 Threshold Limit	2 Hazardous Limit	3 Lethal Concern
Hydrogen Sulfide	H ₂ S	1.18	10 ppm	250 ppm/hr	800 ppm
Sulfur Dioxide	SO ₂	2.21	5 ppm	—	1000 ppm
Carbon Monoxide	CO	0.97	50 ppm	400 ppm/hr	1000 ppm
Carbon Dioxide	CO ₂	1.52	5000 ppm	5%	10%
Methane	CH ₄	0.55	90000 ppm	Combustible above 5% in Air	--

1. Threshold - Concentration at which it is believed that all workers may repeatedly be exposed, day after day, without adverse side effects.

2. Hazardous - Concentration that may cause death.

3. Lethal - Concentration that will cause death with short-term exposure

A. Hydrogen Sulfide

General Properties

Hydrogen Sulfide itself is a colorless and transparent gas and is flammable. It is heavier than air and, hence, may accumulate in low places.

Although the slightest presence of H_2S in the air is normally detectable by its characteristic "rotten egg" odor, it is dangerous to rely on the odor as a means of detecting excessive concentrations because the sense of smell is rapidly lost, allowing lethal concentrations to be accumulated without warning. The following table indicates the poisonous nature of Hydrogen Sulfide, which is more toxic than Carbon Monoxide.

Common names: sour gas, acid gas, rotten egg gas, sulphur gas, sulphurated gas, sweet gas (H_2S is a sweet tasting gas, but often the word "tasting" is left out).

Physical - Chemical Properties

Chemical Formula H_2S

1. Specific Gravity (air = 1.000) 1.193 (@ 77 F)
2. Color None
3. Odor Compare to rotten eggs
4. Odor Threshold 0.13 part of 1 ppm
5. Corrosivity Reacts with metals, plastics, tissues and nerves.
6. Solubility in Water 4.0 to 1 in H_2O @ 32 F
2.6 to 1 in H_2O @ 68 F
7. Effects on Humans Olfactory nerves, respiratory nerves, irritates sensitive membranes in eyes, nose, and throat.
8. Vapor Pressure 19.6 atmospheres at 25 C

9. Explosive Limits 4.3% to 46% by volume in air
10. Ignition Temperature 18 F (burns with a pale flame)
11. Molecular Weight 34.08
12. Conversion Factors 1 mg / 1 of air = 717 ppm (at 25 C and 760 mm HG). 1 ppm = 0.00139 mg / 1 of air
13. pH 3 in water

Industrial Occurrences

Hydrogen Sulfide exposures occur in certain processes in the petroleum industry, chemical plants, chemical laboratories, sulfur and gypsum mines, viscose rayon and rubber industries, tanneries, and in the manufacture of some chemicals, dyes and pigments. It may be encountered in excavations in swampy or filled ground. It is produced when sulfur-containing organic matter decomposes, and it can therefore be found in sewage or organic-waste treatment plants. A common sewer gas, it may find its way into utility manholes, particularly dangerous when encountered in tanks, vessels, and other enclosed spaces.

Toxic Properties

Hydrogen Sulfide is an extremely toxic and irritating gas. Free Hydrogen Sulfide in the blood reduces its oxygen-carrying capacity, thereby depressing the nervous system. Sufficiently high concentrations cause blocking of the phrenic nerve, resulting in immediate collapse and death due to respiratory failure and asphyxiation.

Because Hydrogen Sulfide is oxidized quite rapidly to sulfates in the body, no permanent after effects occur in cases of recovery from acute exposures unless oxygen deprivation of the nervous system is prolonged. However, in cases of acute exposures, there is always the possibility that pulmonary edema may develop. It is also reported that symptoms such as nervousness, dry nonproductive coughing, nausea, headache, and insomnia, lasting up to about three days, have occurred after acute exposures to Hydrogen Sulfide.

At low concentrations the predominant effect of Hydrogen Sulfide is on the eyes and respiratory tract. Eye irritation, conjunctivitis, pain, lacrimation, keratitis, and photophobia may persist for several days. Respiratory tract symptoms include coughing, painful breathing, and pain in the nose and throat.

There is no evidence that repeated exposures to Hydrogen Sulfide result in accumulative or systemic poisoning. Effects such as eye irritation, respiratory tract irritation, slow pulse rate, lassitude, digestive disturbances, and cold sweats may occur, but these symptoms disappear in a relatively short time after removal from the exposure. Repeated exposures to Hydrogen Sulfide do not appear to cause any increase or decrease in susceptibility to this gas.

The paralytic effect of Hydrogen Sulfide on the olfactory nerve is probably the most significant property of the gas. This paralysis may create a false sense of security. A worker can be overcome after the typical rotten-egg odor has disappeared. Rather than the characteristic Hydrogen Sulfide odor, some victims of sudden acute overexposure have reported a brief, sickeningly sweet odor just prior to unconsciousness.

Subjective olfactory responses to various concentrations of Hydrogen Sulfide have been summarized as follows:

0.2 ppm.....	No odor
0.13 ppm.....	Minimal perceptible odor
0.77 ppm.....	Faint, but readily perceptible odor
4.60 ppm.....	Easily detectable, moderate odor
27.0 ppm.....	Strong, unpleasant odor, but not intolerable

Physiological responses to various concentrations of Hydrogen Sulfide have been reported as follows:

10 ppm.....	Beginning eye irritation
50-100 ppm.....	Slight conjunctivitis and respiratory tract irritation after 1 hour exposure.

100 ppm.....	Coughing, eye irritation, loss of sense of smell after 2-15 minutes. Altered respiration, pain in the eyes, and drowsiness after 15-30 minutes, followed by throat irritation after 1 hour. Several hours' exposure results in gradual increase in severity of these symptoms and death may occur within the next 48 hours.
200-300 ppm.....	Marked conjunctivitis and respiratory tract irritation after 1 hour of exposure.
500-700 ppm.....	Loss of consciousness and possibility of death in 30 minutes to 1 hour.
700-1000 ppm.....	Rapid unconsciousness, cessation of respiration, and death.
1000-2000 ppm.....	Unconsciousness at once, with early cessation of respiration and death in a few minutes. Death may occur even if individual is removed to fresh air at once.

Acceptable Concentrations

Acceptable Eight-Hour Time-Weighted Average

To avoid discomfort, the time-weighted average concentration of Hydrogen Sulfide shall not exceed 10 ppm.

Acceptable Ceiling Concentrations

The acceptable concentration for protection of health for an eight-hour, five-day week shall be 20 ppm. Fluctuations are to occur below this concentration.

Acceptable Maximum for Peaks Above Acceptable Base Line for Continuous Exposure

A single-peak concentration not exceeding 50 ppm for a maximum of 10 minutes is allowable provided that the daily time-weighted average is not exceeded.

H₂S Equivalents

<u>Parts per Million</u>	<u>Percents</u>	<u>Grains per 100 cu. ft.</u>
1	.0001	.055
10	.001	.55
18	.0018	1.0
100	.01	5.5
1000	.1	55.5
10000	1.0	555.5

Grains per 100 cu. ft. = % by volume; Mole 636.4 1% by volume = 10,000 ppm

B. Sulfur Dioxide

Sulfur Dioxide (SO₂) is a colorless, transparent gas and is non-flammable.

Sulfur Dioxide is produced during the burning of H₂S. Although SO₂ is heavier than air, it will be picked up by a breeze and carried downwind at elevated temperatures. While Sulfur Dioxide is extremely irritating to the eyes and mucous membranes of the upper respiratory tract, it has exceptionally good warning powers in this respect.

Physical - Chemical Properties

Chemical Formula SO₂

1. Specific Gravity (air = 1.000) 2.212

2. Color None

3. Flammable No

4. Odor Characteristic, pungent, gives ample warning of its presence.

5. Corrosivity Dry – not corrosive to ordinary metals
Wet – corrosive to most common metals

6. Allowable Concentrations 5 ppm (ACGIH)
5 ppm (OSHA)

7. Effects on Humans..... Irritates eyes, throat and upper respiratory system

Concentrations & Effects

%SO₂	ppm	Effects
.0005	5	Pungent odor-normally a person can detect SO ₂ in this range.
.001	10	Safe for eight (8) hour exposure.
.0012	12	Throat irritation, coughing, constriction of the chest, tearing and smarting of the eyes.
.015	150	So irritating that it can only be endured for a few minutes.
.05	500	Causes a sense of suffocation, even with the first breath.

Toxic Properties

Sulfur Dioxide is an irritating gas in its vapor form and the odor is so intensely irritating that concentrations of 3 to 5 parts per million in the air are readily detectable by the normal person. In higher concentrations, the severely irritating effect of the gas makes it unlikely that any person would be able to remain in a Sulfur Dioxide contaminated atmosphere unless he were unconscious or trapped.

Sulfur Dioxide gas is intensely irritating to the eyes, throat, and upper respiratory system. Inhalation of this gas in concentrations of 8 to 12 parts per million in air causes throat irritation, coughing, constriction of the chest, tearing and smarting of the eyes. 150 parts per million is so extremely irritating that it can be endured only for a few minutes. 500 parts per million is so acutely irritating to the upper respiratory tract that it causes a sense of suffocation, even with the first breath.

Out of numerous reported exposures to Sulfur Dioxide, there are few references that would indicate pneumonia as an after effect.

Wildlife and Vegetative Species of Concern

Wolverine Federal #17-2

The Wolverine Federal #17-2 wellsite is located approximately 4.2 miles southeast of the town of Sigurd in Township 23 South - Range 1 West, Section 17: Southeast Quarter of the Southwest Quarter (SE/SW), Salt Lake Base and Meridian in Sevier County, Utah.

The proposed Wolverine Federal #17-2 is situated adjacent to Highway 24 in a gentle rolling plains with hilly terrain on the west side. Plant habitat types within the area consist of a combination of Pinyon Pine- Juniper, located on the hillsides, and sagebrush - grass communities in the less gradient areas.

THE PROPOSED ACTIONS

The proposed depth is 9,100 feet for the Wolverine Federal #17-2 well. The well pad dimensions will be approximately 300 feet by 430 feet. The access road will be constructed by initially using fill material and covering it with approximately 8 inches of shale/gravel. Another layer of road base material, approximately 4 inches in depth, will be placed on top of the shale/gravel.

WILDLIFE AND VEGETATIVE SPECIES OF CONCERN

Potential effects concerning federally endangered, threatened, proposed, candidate, sensitive, and management indicator wildlife and vegetative species will be evaluated in the proposed area of disturbance before any surface disturbing activities occur. It is understood that these activities and the proposed location will be evaluated by a BLM staff or approved biologist. A habitat analysis will be done to evaluate which species may occur in the area. Surface use guidelines will be followed as will surface use restrictions and time limit stipulations in the areas of concern for all affected species.

It is understood that the Wolverine Federal #17-2 wellsite is situated within a designated critical deer wintering range. Proposed activities are not anticipated to occur during any such wintering range seasonal restrictions. There is also the possibility that small clumps of Penstemon plants may be located within this project area. Wolverine Gas and Oil Company of Utah, LLC will take all necessary steps to protect the species of concern and as stipulated by the Bureau of Land Management.

BOND STATEMENT

Bond coverage pursuant to 43 CFR 3104 for lease activities is being provided by Wolverine Gas and Oil Company of Utah, LLC with their Bond, filed with Bureau of Land Management in the amount of \$150,000.

The Bond Number is WY3329

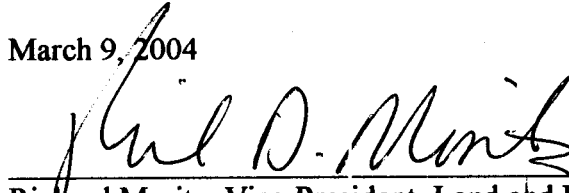
OPERATOR'S REPRESENTATIVE AND CERTIFICATIONS

The responsible field representative for the Wolverine Federal #17-1, on behalf of Wolverine Gas and Oil Company of Utah, LLC, is Timothy J. Brock, P.E. and is available via Wolverine Gas and Oil Company of Utah, LLC, One Riverfront Plaza, 55 Campau NW, Grand Rapids, MI 49503. (616) 458-1150.

I hereby certify that I, or persons under my direct supervision, have inspected the drill site and access route; that I am familiar with the conditions that currently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and that the work associated with operations proposed herein will be performed by Wolverine Gas and Oil Company of Utah, LLC and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved. This statement is subject to the provisions of 18 U.S.C. 1001 for the filing of a false statement.

Date: March 9, 2004

Name and Title:


Richard Moritz, Vice-President, Land and Legal

OPERATOR RIDER

This rider is being submitted to comply with 43 CFR 3104.2 which states "... The operator on the ground shall be covered by a bond in his/her own name as principal, or a bond in the name of the lessee or sublessee, provided that a consent of the surety, or the obligor in the case of a personal bond, to include the operator under the coverage of the bond is furnished to the Bureau of-
fice maintaining the bond."

The obligor hereby agrees to extend the coverage of their bond to include liabilities for operations conducted by Wolverine Gas and Oil Company of Utah, LLC and Wolverine Gas and Oil Company of Wyoming, LLC on Federal oil and gas leases.

Coverage includes the performance of all lease obligations, both past and future, including the responsibility to properly plug and abandon any and all wells, including related surface restoration, and to pay any outstanding rentals or royalties due.

This coverage of operations shall continue whether or not the lease subsequently expires, terminates, is canceled, or relinquished; provided, however, that this rider shall not act to increase the actual cumulative or potential liability of the obligor above the face amount of the bond.

Executed this 3rd day of March, 2004.

Witness:

Evelyn Telgen
Evelyn Telgen

One Riverfront Plaza, 55 Campau NW
Grand Rapids, MI 49503-2616
Address of witness

Wolverine Gas and Oil Corporation
Obligor

Gary R. Blecker
For Obligor: Gary R. Blecker
Vice President and COO

One Riverfront Plaza, 55 Campau NW
Grand Rapids, MI 49503-2616
Obligor's address

CONFIDENTIAL**WOLVERINE GAS & OIL COR.****FIGURE #2**

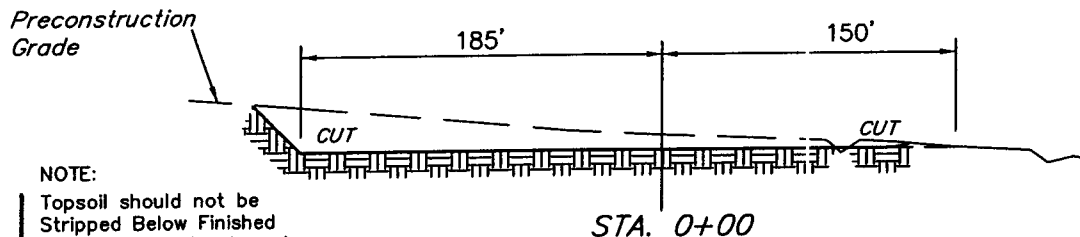
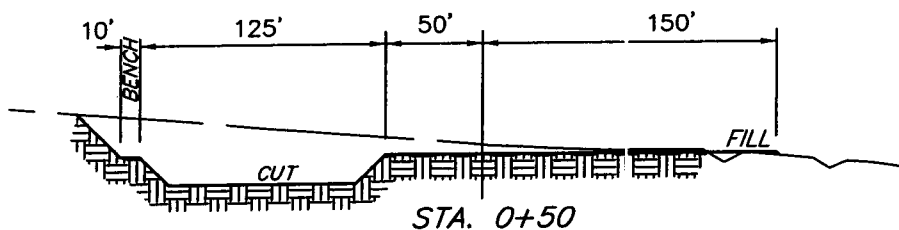
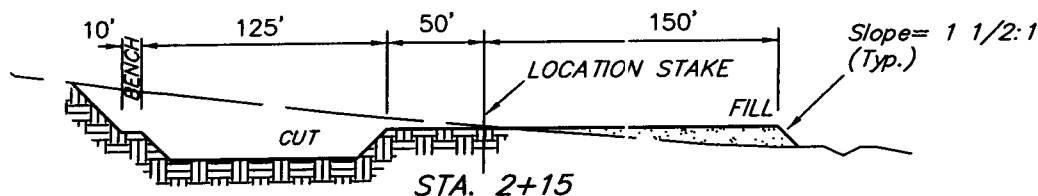
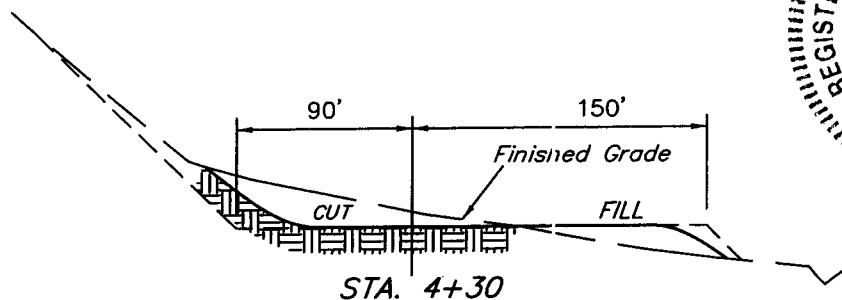
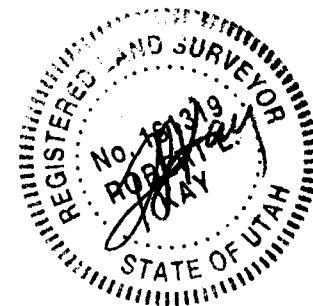
TYPICAL CROSS SECTIONS FOR

WOLVERINE FEDERAL #17-2
SECTION 17, T23S, R1W, S.L.B.&M.

869' FSL 1901' FWL

1" = 40'
X-Section
Scale
1" = 100'

DATE: 3-10-04
Drawn By: C.G.



NOTE:
Topsoil should not be
Stripped Below Finished
Grade on Substructure Area.

* NOTE:
FILL QUANTITY INCLUDES
5% FOR COMPACTION

APPROXIMATE YARDAGES**CUT**

(6") Topsoil Stripping = 2,950 Cu. Yds.

Remaining Location = 29,190 Cu. Yds.

TOTAL CUT = 32,140 CU.YDS.**FILL = 9,280 CU.YDS.**

EXCESS MATERIAL = 22,860 Cu. Yds.

Topsoil & Pit Backfill = 7,010 Cu. Yds.
(1/2 Pit Vol.)EXCESS UNBALANCE = 15,850 Cu. Yds.
(After Rehabilitation)

UINTAH ENGINEERING & LAND SURVEYING
85 So. 200 East * Vernal, Utah 84078 * (435) 789-1017

CONFIDENTIAL

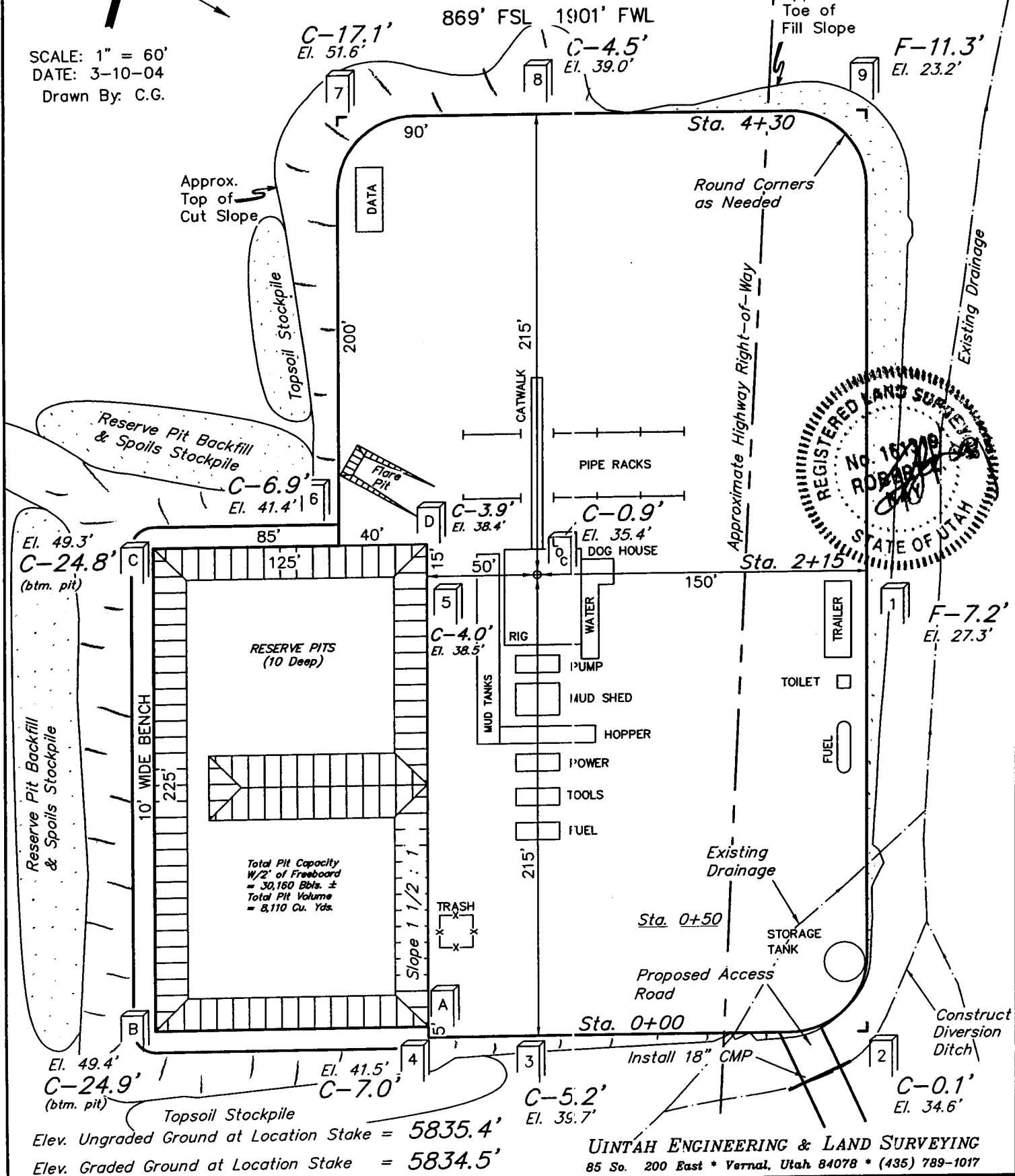
WOLVERINE GAS & OIL C. P.

FIGURE #1

LOCATION LAYOUT FOR

WOLVERINE FEDERAL #17-2
SECTION 17, T23S, R1W, S.L.B.&M.

SCALE: 1" = 60'
DATE: 3-10-04
Drawn By: C.G.



UINTAH ENGINEERING & LAND SURVEYING
85 So. 200 East * Vernal, Utah 84078 * (435) 789-1017

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T23S

HIGHWAY 89 6.0 MI. +/-
SALINA 14.9 MI. +/-

**PROPOSED LOCATION:
WOLVERINE FEDERAL #17-2**

PROPOSED ACCESS 300' +/-

**R R
2 1
W W**

LEGEND:

- EXISTING ROAD
- PROPOSED ACCESS ROAD



WOLVERINE GAS & OIL CORP.

**WOLVERINE FEDERAL #17-2
SECTION 17, T23S, R1W, S.L.B.&M.
869' FSL 1901' FWL**



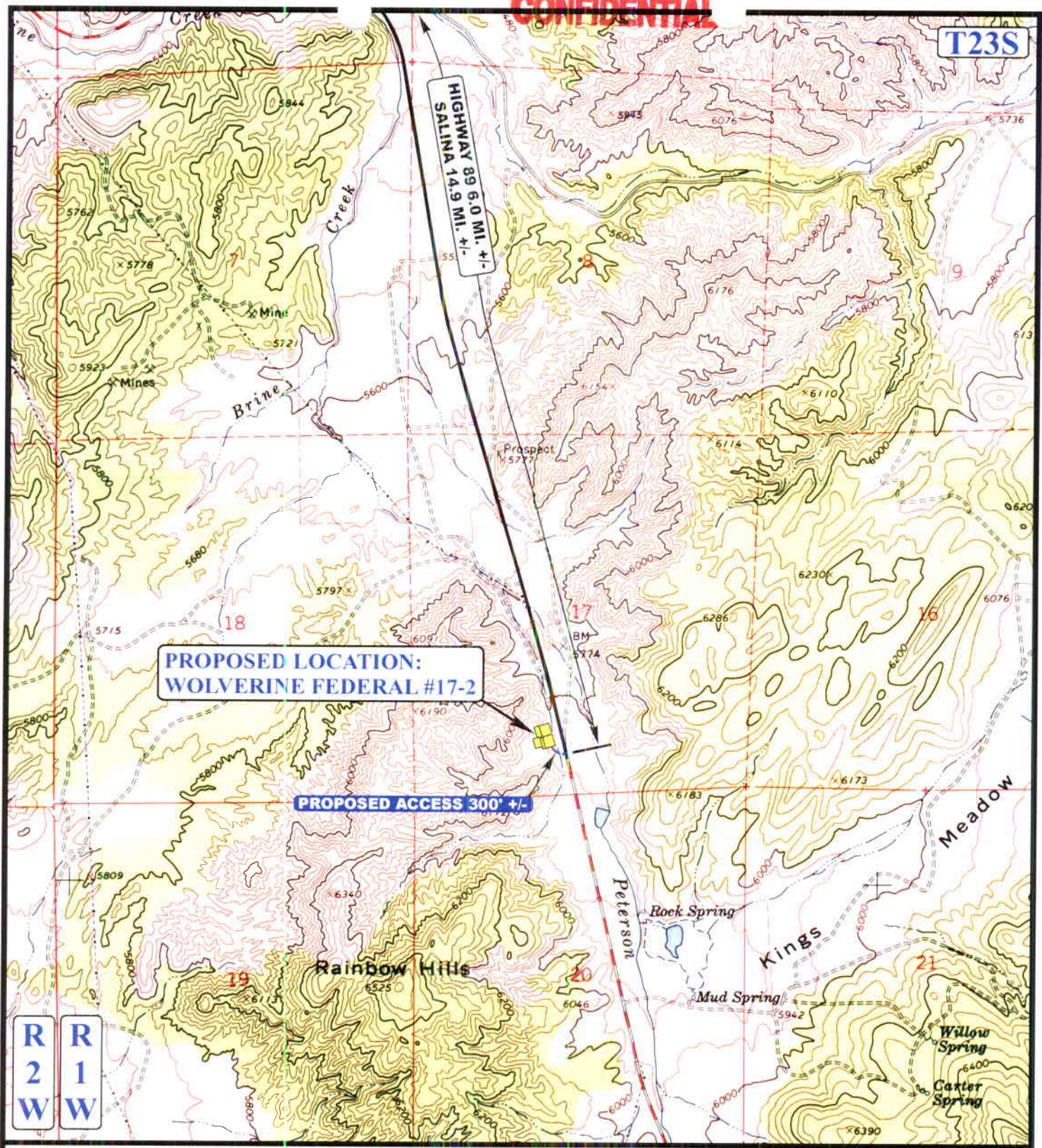
Uintah Engineering & Land Surveying
85 South 200 East Vernal, Utah 84078
(435) 789-1017 * FAX (435) 789-1813

**TOPOGRAPHIC
MAP**

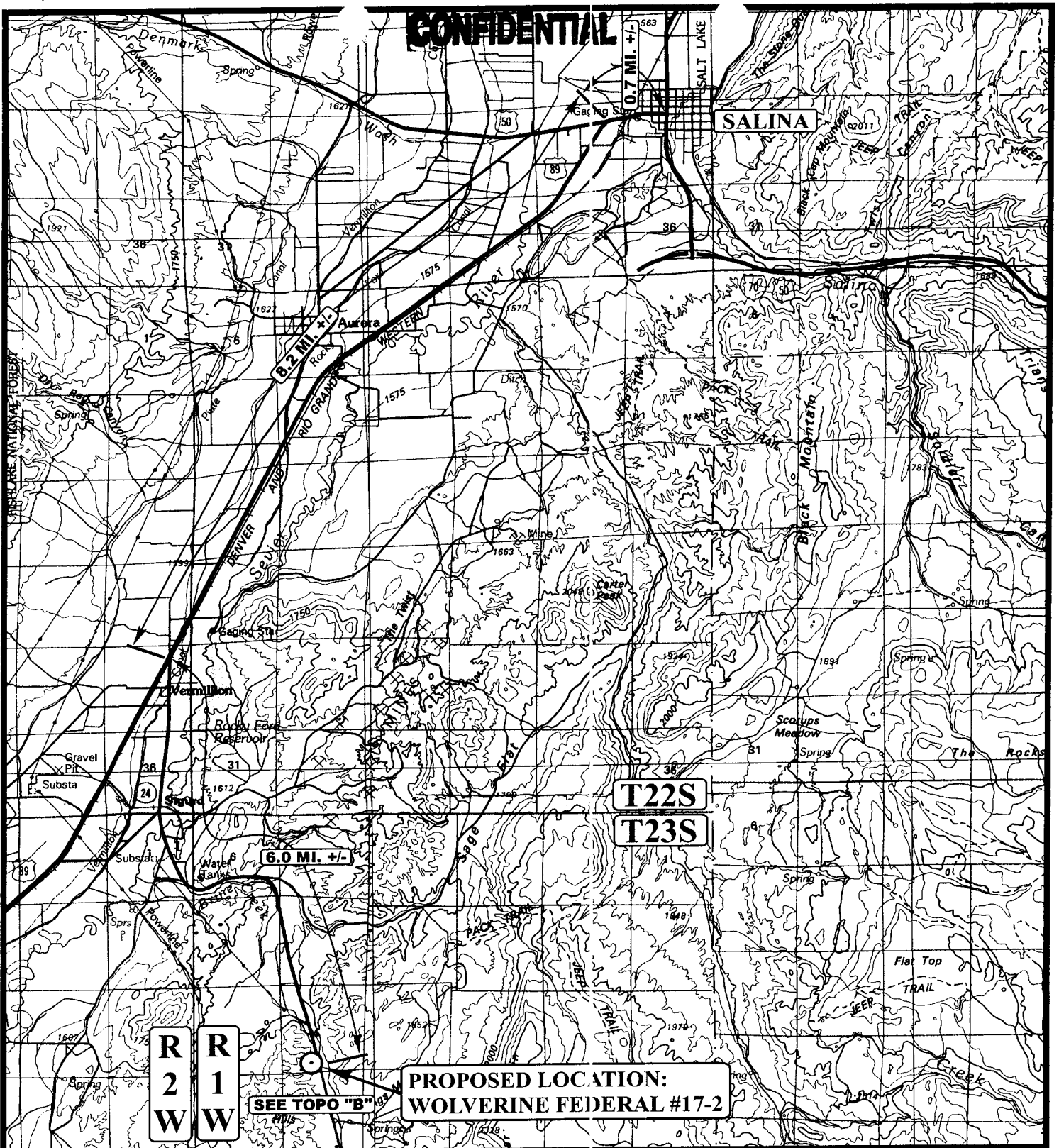
SCALE: 1" = 2000' DRAWN BY: P.M. REVISED: 03-11-04

03 10 04
MONTH DAY YEAR

**B
TOPO**



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LEGEND:

⊙ PROPOSED LOCATION

WOLVERINE GAS & OIL CORP.

WOLVERINE FEDERAL #17-2
SECTION 17, T23S, R1W, S.L.B.&M.
869' FSL 1901' FWL



Uintah Engineering & Land Surveying
85 South 200 East Vernal, Utah 84078
(435) 789-1017 * FAX (435) 789-1813



TOPOGRAPHIC 03 10 04
MAP MONTH DAY YEAR
SCALE: 1:100,000 DRAWN BY: P.M. REVISED: 03-11-04

A
TOPO

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WOLVERINE GAS & OIL CORP.
WOLVERINE FEDERAL #17-2
LOCATED IN SEVIER COUNTY, UTAH
SECTION 17, T23S, R1W, S.L.B.&M.

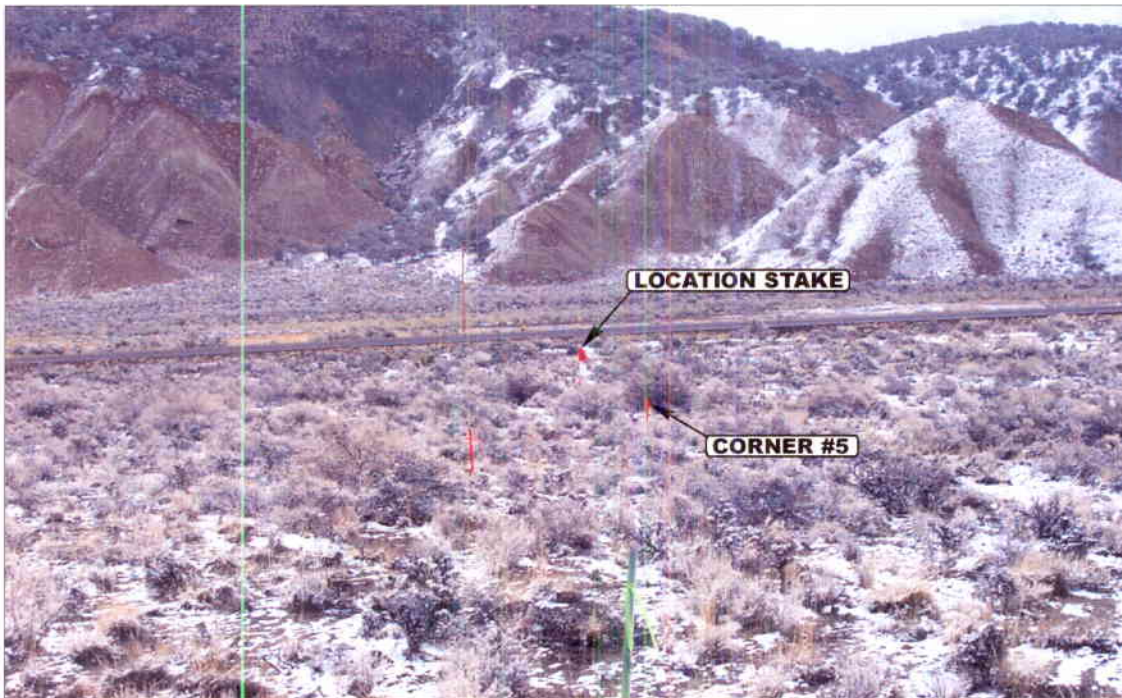


PHOTO: VIEW FROM CORNER #5 TO LOCATION STAKE

CAMERA ANGLE: NORTHEASTERLY



PHOTO: VIEW FROM BEGINNING OF PROPOSED ACCESS

CAMERA ANGLE: NORTHWESTERLY



- Since 1964 -

UELS Uintah Engineering & Land Surveying
85 South 200 East Vernal, Utah 84078
435-789-1017 uels@uelsinc.com

LOCATION PHOTOS

03 **10** **04**
MONTH DAY YEAR

PHOTO

TAKEN BY: G.O.

DRAWN BY: P.M.

REVISED: 03-11-04

WORKSHEET

APPLICATION FOR PERMIT TO DRILL

007

APD RECEIVED: 03/16/2004

API NO. ASSIGNED: 43-041-30031

WELL NAME: WOLVERINE FED 17-2

OPERATOR: WOLVERINE GAS & OIL CO (N1655)

CONTACT: RICHARD MORITZ

PHONE NUMBER: 616-458-1150

PROPOSED LOCATION:

SESW 17 230S 010W

SURFACE: 0869 FSL 1901 FWL

BOTTOM: 0869 FSL 1901 FWL

SEVIER

UNDESIGNATED (2)

LEASE TYPE: 1 - Federal

LEASE NUMBER: UTU-73528

SURFACE OWNER: 1 - Federal

PROPOSED FORMATION: NAVA

COALBED METHANE WELL? NO

INSPECT LOCATN BY: / /

Tech Review	Initials	Date
Engineering		
Geology		
Surface		

LATITUDE: 38.79739

LONGITUDE: 111.93390

RECEIVED AND/OR REVIEWED:

☒ Plat
☒ Bond: Fed[1] Ind[] Sta[] Fee[]
 (No. WY 3329)
☒ Potash (Y/N)
☒ Oil Shale 190-5 (E) or 190-3 or 190-13
☒ Water Permit
 (No. 1632529)
☒ RDCC Review (Y/N)
 (Date: _____)
☒ Fee Surf Agreement (Y/N)

LOCATION AND SITING:

___ R649-2-3.
 Unit WOLVERINE
 ___ R649-3-2. General
 Siting: 460 From Qtr/Qtr & 920' Between Wells
☒ R649-3-3. Exception
 ___ Drilling Unit
 Board Cause No: _____
 Eff Date: _____
 Siting: _____
 ___ R649-3-11. Directional Drill

COMMENTS: _____

STIPULATIONS: _____

1- Federal Approval
 2- Spacing Strip

T23S RIW

WOLVERINE UNIT

KINGS MEADOW RANCHES 17-1

WOLVERINE FED 17-2

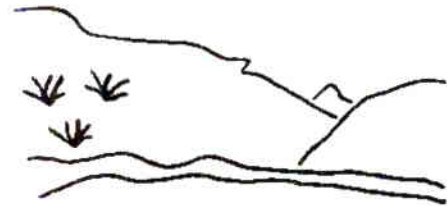
OPERATOR: WOLVERINE G&O CO (N1655)

SEC. 17 T.23S, R.1W

FIELD: WILDCAT (001)

COUNTY: SEVIER

SPACING: R649-3-3 / EXCEPTION LOCATION



Utah Oil Gas and Mining

Well Status

- GAS INJECTION
- GAS STORAGE
- LOCATION ABANDONED
- NEW LOCATION
- PLUGGED & ABANDONED
- PRODUCING GAS
- PRODUCING OIL
- SHUT-IN GAS
- SHUT-IN OIL
- TEMP. ABANDONED
- TEST WELL
- WATER INJECTION
- WATER SUPPLY
- WATER DISPOSAL

Unit Status

- EXPLORATORY
- GAS STORAGE
- NF PP OIL
- NF SECONDARY
- PENDING
- PI OIL
- PP GAS
- PP GEOTHERML
- PP OIL
- SECONDARY
- TERMINATED

Field Status

- ABANDONED
- ACTIVE
- COMBINED
- INACTIVE
- PROPOSED
- STORAGE
- TERMINATED



PREPARED BY: DIANA WHITNEY
DATE: 18-MARCH-2004

Form 3160-3
(September 2001)UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

FORM APPROVED
OMB No. 1004-0136
Expires January 31, 2004

1a. Type of work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. UTU-73528
1b. Type of Well: <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other <input checked="" type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name
2. Name of Operator Wolverine Gas and Oil Company of Utah, LLC		7. If Unit or CA Agreement, Name and No. Wolverine Fed. Exploration Unit
3a. Address One Riverfront Plaza, 55 Campan NW Grand Rapids, MI 49503-2616		8. Lease Name and Well No. Wolverine Federal #17-2
3b. Phone No. (include area code) 616-458-1150		9. API Well No. 43-041-30031
4. Location of Well (Report location clearly and in accordance with any State requirements.)* At surface SE/SW 869' FSL & 1,901' FWL 4294500X 38-79739 At proposed prod. zone SAME 418899Y -111-93390		10. Field and Pool, or Exploratory Exploratory
14. Distance in miles and direction from nearest town or post office* 5.9 miles South of Sigurd, Utah		11. Sec., T. R. M. or Blk. and Survey or Area SESW, Section 17, T23S-R1W
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)	16. No. of acres in lease:	12. County or Parish Sevier
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.	19. Proposed Depth 6,650'	13. State UT
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 5,834.5' - GL	22. Approximate date work will start* 05/25/2004	17. Spacing Unit dedicated to this well
		20. BLM/BIA Bond No. on file WY 3329
		23. Estimated duration Drilling: 60 days

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No 1, shall be attached to this form:

- Well plat certified by a registered surveyor.
- A Drilling Plan.
- A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office).
- Bond to cover the operations unless covered by an existing bond on file (see item 20 above).
- Operator certification
- Such other site specific information and/or plans as may be required by the authorized officer.

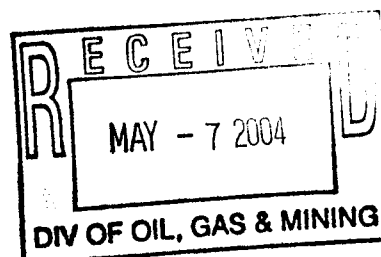
25. Signature <i>Richard D. Moritz</i>	Name (Printed/Typed) Richard Moritz	Date 05/06/04
Title Vice-President, Land & Legal		
Approved by (Signature) <i>Bradley G. Hill</i>	Name (Printed/Typed) BRADLEY G. HILL	Date 05-17-04
Title ENVIRONMENTAL SCIENTIST III		

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Conditions of approval, if any, are attached.

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

*(Instructions on page 2)



T23S, R1W, S.L.B.&M.

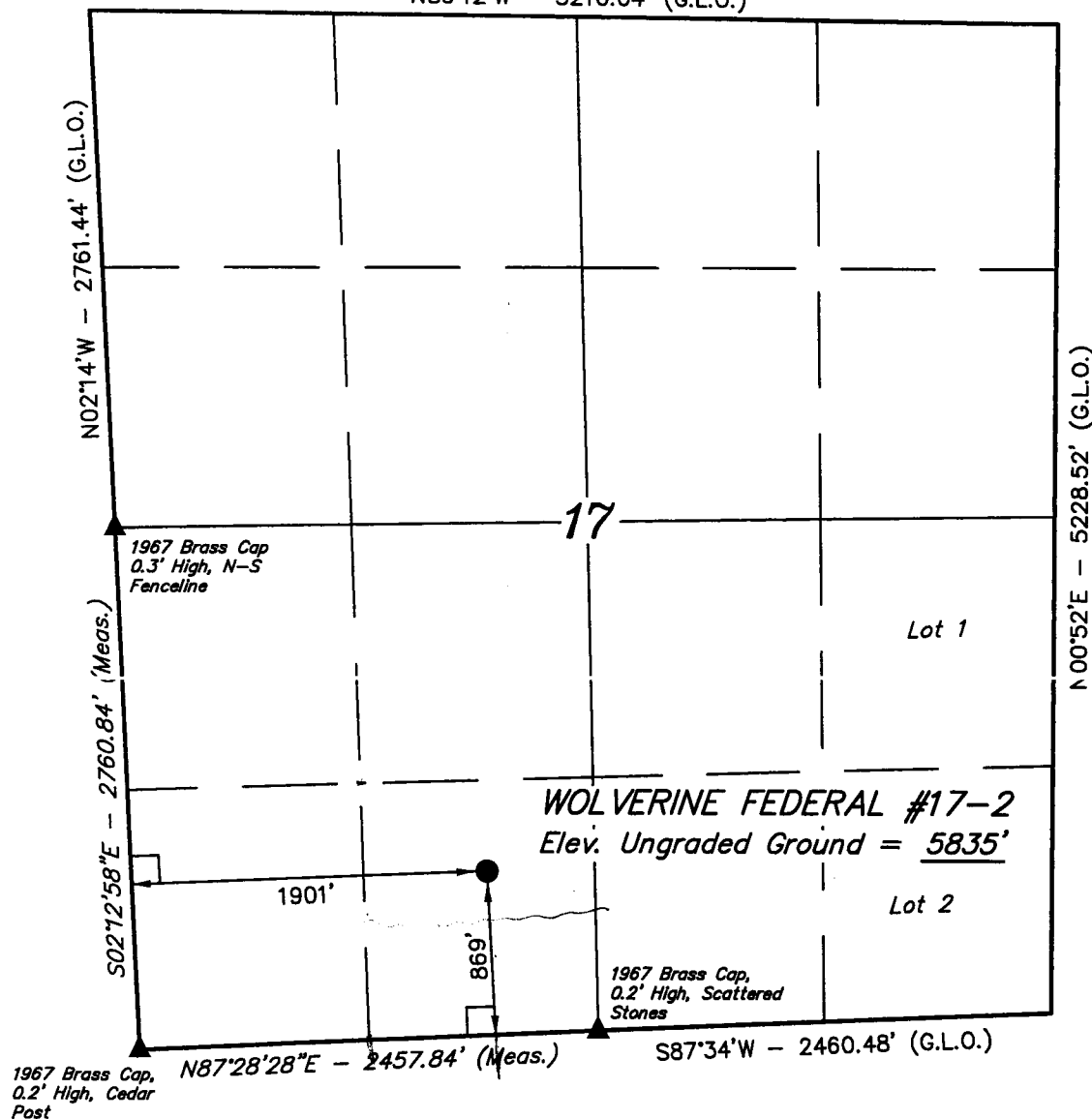
N89°12'W - 5210.04' (G.L.O.)

WOLVERINE GAS & OIL CORP.




Well location, WOLVERINE FEDERAL #17-2,
located as shown in the SE 1/4 SW 1/4 of
Section 17, T23S, R1W, S.L.B.&M., Sevier County,
Utah.

BASIS OF ELEVATION

SPOT ELEVATION LOCATED NEAR A ROAD IN THE SW 1/4 OF SECTION 17, T23S, R1W, S.L.B.&M., TAKEN FROM THE SIGURD QUADRANGLE, UTAH, SEVIER COUNTY, 7.5 MINUTE SERIES (TOPOGRAPHICAL MAP) PUBLISHED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY. SAID ELEVATION IS MARKED AS BEING 5774 FEET.

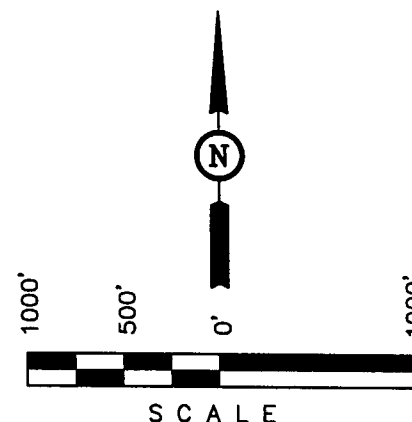


LEGEND:

-  = 90° SYMBOL
 = PROPOSED WELL HEAD.
 = SECTION CORNERS LOCATED.

BASIS OF BEARINGS

BASIS OF BEARINGS IS A G.P.S. OBSERVATION.
(AUTONOMOUS NAD 83)
LATITUDE = 38°47'51.45" (38.797625)
LONGITUDE = 111°56'05.38" (111.934828)



CONFIDENTIAL

CERTIFICATE

THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM
FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY
SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE
BEST OF MY KNOWLEDGE AND BELIEF.

REGISTERED LAND SURVEYOR
REGISTRATION NO. 161319
STATE OF UTAH

UTAH ENGINEERING & LAND SURVEYING
 85 SOUTH 200 EAST - VERNAL, UTAH 84078
 (435) 789-1017

SCALE 1" = 1000'	DATE SURVEYED: 3-4-04	DATE DRAWN: 3-10-04
PARTY G.O. D.J. C.G.	REFERENCES G.L.O. PLAT	
WEATHER COOL	FILE WOLVERINE GAS & OIL CORP.	

002



May 13, 2004

Utah Division of Oil, Gas & Mining
1594 W. N. Temple Suite 1210
Salt Lake City, Utah 84114-5801

RE: Wolverine Gas & Oil requests permission to drill the Wolverine Federal #17-2 well
as an exception to Rule R649-3-3

Gentlemen:

Pursuant to Rule R649-3-3 of the State's Oil & Gas Conservation regulations, Wolverine Gas & Oil Company of Utah, LLC, hereby makes application for approval to drill an oil & gas well.

Wolverine Gas & Oil Company of Utah, LLC (Wolverine) proposes to drill the Wolverine Federal #17-2 well to a total depth of 6,650 feet. Wolverine is the only operator within a 460 foot radius.

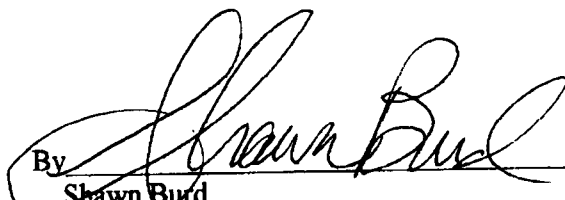
The reason for the proposed exception is that the proposed Wolverine Federal #17-2 well is currently staked outside of the "window" due to topographic reasons. Drilling within the "window" would prove unsafe and not cost effective.

Attached hereto is a plat as required by the Commissions rules and regulations.

If no objections are filed, the applicant requests that this application be approved. If objections are filed, applicant requests the matter be set for hearing and that it be advised of the hearing date.

Respectfully submitted,

Wolverine Gas & Oil Company of Utah, LLC

By 
Shawn Burd
Authorized Agent

RECEIVED

MAY 13 2004

DIV. OF OIL, GAS & MINING

WESTERN LAND SERVICES, INC.

54 W. Seymour Street • Sheridan, Wyoming 82801 • Phone: (307) 673-1817 • Fax: (307) 673-1823

Web: www.westernls.com • E-mail: wls-west@westernls.com



OLENE S. WALKER
Governor
GAYLE F. McKEACHNIE
Lieutenant Governor

State of Utah
DEPARTMENT OF NATURAL RESOURCES
Division of Water Rights

ROBERT L. MORGAN
Executive Director

JERRY D. OLDS
State Engineer/Division Director

April 12, 2004

Kings Meadow Ranches
C/O Mack Dastrup
P.O. Box 570125
Sigurd, UT 84657

RE: TEMPORARY CHANGE APPLICATION
t28851

Dear Sir:

The above numbered Temporary Change Application has been approved subject to prior rights and the following condition:

- ♦ The total amount of water diverted from Kings Meadow Creek will be limited to 14.0 acre-feet of water for uses associated with gas well drilling from May 30, 2004 to May 30, 2005. The historically irrigated land totaling 4.667 acres will not be irrigated.

Copies are herewith returned to you for your records and future reference.

Sincerely,

Kirk Forbush, P.E.
Regional Engineer
for Jerry Olds, State Engineer

RECEIVED

MAY 13 2004

DIV. OF OIL, GAS & MINING

JO/KF/cr
enclosure

APPLICATION FOR TEMPORARY CHANGE OF WATER

STATE OF UTAH

DIVISION OF WATER RIGHTS

Rec. by KfFee Paid \$ 75.00Receipt # 04-01540

APR 7 2004

Microfilmed

Roll #

RICHFIELD AREA

ck # 2516

For the purpose of obtaining permission to make a temporary change of water in the State of Utah, application is hereby made to the State Engineer, based upon the following showing of facts, submitted in accordance with the requirements of Section 73-3-3 Utah Code Annotated 1953, as amended.

*WATER RIGHT NO. 63 2529*APPLICATION NO. 28851

Changes are proposed in (check those applicable)

☒ point of diversion. ☒ place of use. ☒ nature of use. ☒ period of use.

1. OWNER INFORMATION

Name: Kings Meadow Ranches - Evan Dastrup*Interest: %Address: P.O. Box 116City: SigurdState: UtahZip Code: 846572. *PRIORITY OF CHANGE: 4/7/04*FILING DATE: 4/7/043. RIGHT EVIDENCED BY: A Portion 63-2529Prior Approved Temporary Change Applications for this right:

***** HERETOFORE *****

4. QUANTITY OF WATER: cfs and/or 14 ac-ft.5. SOURCE: Kings Meadow Creek6. COUNTY: Sevier7. POINT(S) OF DIVERSION: S 1,011', E 1,711' from NW corner of
Section 28, T23S, R1WDescription of Diverting Works: Kings Meadow Creek

8. POINT(S) OF REDIVERSION

The water has been rediverted from at a point: Description of Diverting Works:

9. POINT(S) OF RETURN

The amount of water consumed is cfs or ac-ft.The amount of water returned is cfs or ac-ft.The water has been returned to the natural stream/source at a point(s):

*These items are to be completed by the Division of Water Rights.

RECEIVED
MAY 13 2004

DIV. OF OIL, GAS & MINING

63-2529 (t28851)

20. NATURE AND PERIOD OF USE

Irrigation: From ___/___/___ to ___/___/___
Stockwatering: From ___/___/___ to ___/___/___
Domestic: From ___/___/___ to ___/___/___
Municipal: From ___/___/___ to ___/___/___
Mining: From ___/___/___ to ___/___/___
Power: From ___/___/___ to ___/___/___
Other: From 05/30/04 to 05/30/05

21. PURPOSE AND EXTENT OF USE

Irrigation: _____ acres. Sole supply of _____ acres.
Stockwatering (number and kind): _____
Domestic: _____ Families and/or _____ Persons.
Municipal (name): _____
Mining: _____ Mining District at the _____ Mine.
Ores mined: _____
Power: Plant name: _____ Type: _____ Capacity: _____
Other (describe): Use water for gas well drilling

22. PLACE OF USE

Legal description of place of use by 40 acre tract(s): Section 17, T23S, R1W, SE/SW, SLBM

23. STORAGE

Reservoir Name: _____ Storage Period: from _____ to _____
Capacity: _____ ac-ft. Inundated Area: _____ acres.
Height of dam: _____ feet.
Legal description of inundated area by 40 tract(s): _____

24. EXPLANATORY

The following is set forth to define more clearly the full purpose of this application. Include any supplemental water rights used for the same purpose. (Use additional pages of same size if necessary): _____

Mack Dastrup (435) 896-5206 Kenneth Dastrup (435) 896-8759
P.O. Box 570125 P.O. Box 570056
Sigurd, Utah 84657 Sigurd, Utah 84657

The undersigned hereby acknowledges that even though he/she/they may have been assisted in the preparation of the above numbered application through the courtesy of the employees of the Division of Water Rights, all responsibility for the accuracy of the information contained herein, at the time of filing, rests with the applicant(s).

Mack Dastrup
Signature of Applicant(s)

RECEIVED

MAY 13 2004

DIV. OF OIL, GAS & MINING

RECEIVED
MAY 13 2004

APPLICATION FOR TEMPORARY CHANGE OF WATER

DIV. OF OIL, GAS & MINING

DIVISION OF WATER RIGHTS Rec. by KF
Fee Paid \$ 25.00

STATE OF UTAH APR 7 2004 Receipt # 04-01540

Microfilmed
Roll # _____
RICHFIELD AREA

ck # 2516

For the purpose of obtaining permission to make a temporary change of water in the State of Utah, application is hereby made to the State Engineer, based upon the following showing of facts, submitted in accordance with the requirements of Section 73-3-3 Utah Code Annotated 1953, as amended.

*WATER RIGHT NO. 63 2529 *APPLICATION NO. 28851

Changes are proposed in (check those applicable)

☒ point of diversion. ☒ place of use. ☒ nature of use. ☒ period of use.

1. OWNER INFORMATION

Name: Kings Meadow Ranches - Evan Dastrup

Address: P.O. Box 116

City: Sigurd

State: Utah

Zip Code: 84657

*Interest: _____%

2. *PRIORITY OF CHANGE: 4/7/04

*FILING DATE: 4/7/04

3. RIGHT EVIDENCED BY: A Portion 63-2529

Prior Approved Temporary Change Applications for this right: _____

***** HERETOFORE *****

4. QUANTITY OF WATER: _____ cfs and/or 14 ac-ft.

5. SOURCE: Kings Meadow Creek

6. COUNTY: Sevier

7. POINT(S) OF DIVERSION: S 1,011', E 1,711' from NW corner of
Section 28, T23S, R1W

Description of Diverting Works: Kings Meadow Creek

8. POINT(S) OF REDIVERSION

The water has been rediverted from _____ at a point: _____

Description of Diverting Works: _____

9. POINT(S) OF RETURN

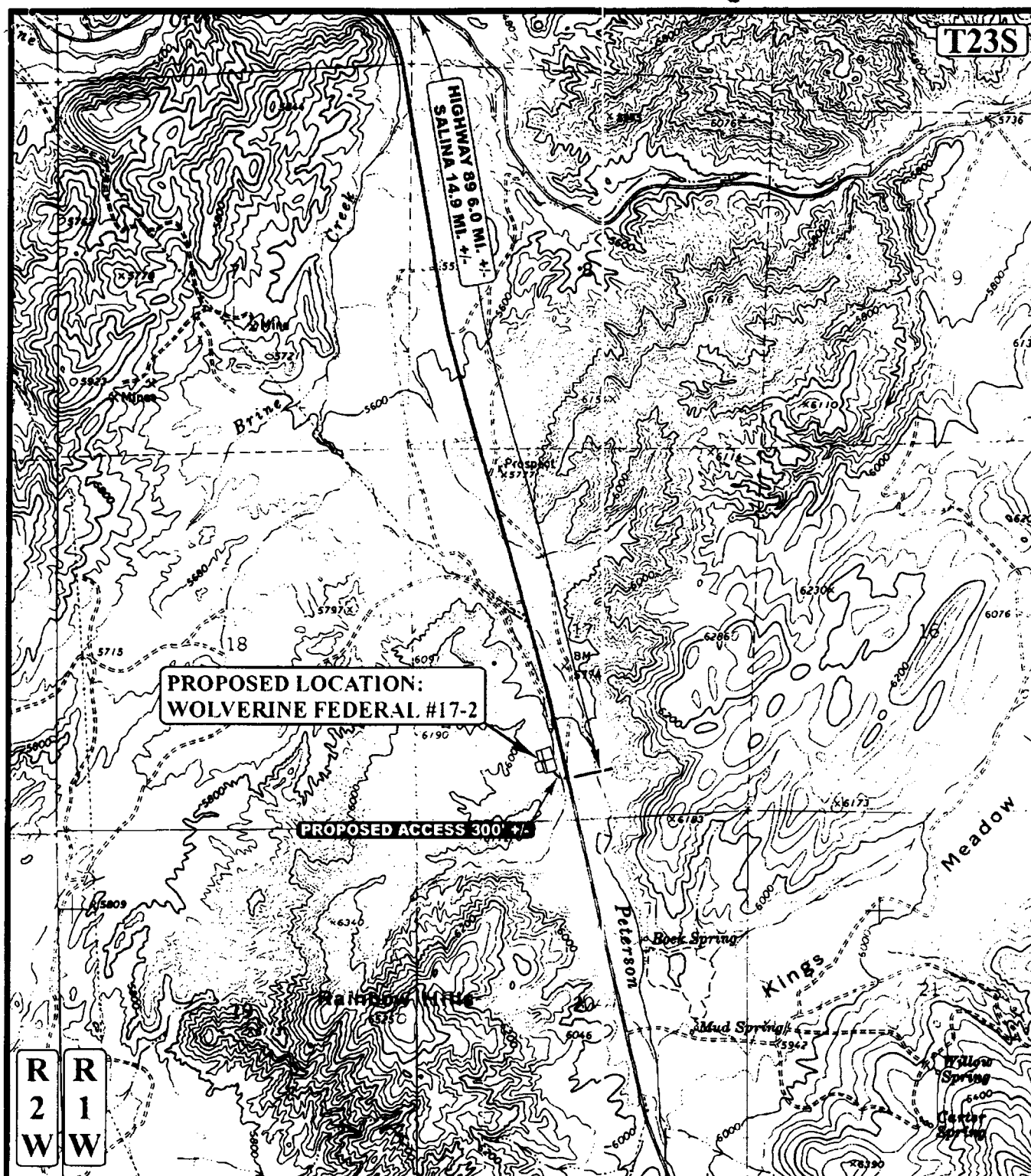
The amount of water consumed is _____ cfs or _____ ac-ft.

The amount of water returned is _____ cfs or _____ ac-ft.

The water has been returned to the natural stream/source at a point(s): _____

*These items are to be completed by the Division of Water Rights.

Temporary Change

**LEGEND:**

————— EXISTING ROAD
 - - - - - PROPOSED ACCESS ROAD

N

WOLVERINE GAS & OIL CORP.

WOLVERINE FEDERAL #17-2
SECTION 17, T23S, R1W, S1E.B.&M.
869' FSL 1901' FWL



Utah Engineering & Land Surveying
 85 South 200 East Vernal, Utah 84078
 (435) 789-1017 * FAX (435) 789-1813

TOPOGRAPHIC 03 10 04
MAP MONTH DAY YEAR

SCALE: 1" = 2000' DRAWN BY: P.M. REVISED: 03-11-04

B
TOPO

004

United States Department of the Interior

BUREAU OF LAND MANAGEMENT

Utah State Office

P.O. Box 45155

Salt Lake City, Utah 84145-0155

IN REPLY REFER TO:

3160

(UT-922)

April 1, 2004

Memorandum

To: Field Office Manger, Richfield Field Office

From: Michael Coulthard, Petroleum Engineer

Subject: 2004 Plan of Development Wolverine Unit
Sevier County, Utah.

Pursuant to email between Diana Whitney, Division of Oil, Gas and Mining, and Mickey Coulthard, Utah State Office, Bureau of Land Management, the following well is planned for calendar year 2004 within the Wolverine Unit, Sevier County, Utah.

API #	WELL NAME	LOCATION
-------	-----------	----------

(Proposed PZ Navajo 2)

43-041-30031 Wolverine Fed 17-2 Sec 17 T23S R01W 0869 FSL 1901 FWL

This office has no objection to permitting the well at this time.

/s/ Michael L. Coulthard

bcc: File - Wolverine Unit
Division of Oil Gas and Mining
Agr. Sec. Chron
Fluid Chron

MCoulthard:mc:4-1-04



March 13, 2004

Utah Division of Oil, Gas & Mining
C/o Diana Whitney
1594 West North Temple, Suite 1210
Salt Lake City, Utah 84114-5801

RE: Wolverine Federal #17-2 well located in T23S – R1W, Section 17: SE/SW, Sevier County, Utah

Dear Dianna:

I have enclosed a hard copy of the water permit and the exception location letter for the proposed Wolverine Federal #17-2 well.

Once again thanks for your help and patience with this matter and I look forward to working with you on future applications. Please feel free to call me at (435) 896-1943 office or (307) 751-0330 cell, should you have any further questions. Thank you for your time Dianna.

Sincerely,

Shawn Burd

Authorized Agent for Wolverine Gas and Oil Company of Utah, LLC

RECEIVED
MAY 17 2004
DIV. OF OIL, GAS & MIN.

WESTERN LAND SERVICES, INC.

54 W. Seymour Street • Sheridan, Wyoming 82801 • Phone: (307) 673-1817 • Fax: (307) 673-1823

Web: www.westernls.com • E-mail: wlwest@westernls.com



WESTERN LAND SERVICES

May 13, 2004

Utah Division of Oil, Gas & Mining
1594 W. N. Temple Suite 1210
Salt Lake City, Utah 84114-5801

RE: Wolverine Gas & Oil requests permission to drill the Wolverine Federal #17-2 well as an exception to Rule R649-3-3

Gentlemen:

Pursuant to Rule R649-3-3 of the State's Oil & Gas Conservation regulations, Wolverine Gas & Oil Company of Utah, LLC, hereby makes application for approval to drill an oil & gas well.

Wolverine Gas & Oil Company of Utah, LLC (Wolverine) proposes to drill the Wolverine Federal #17-2 well to a total depth of 6,650 feet. Wolverine is the only operator within a 460 foot radius.

The reason for the proposed exception is that the proposed Wolverine Federal #17-2 well is currently staked outside of the "window" due to topographic reasons. Drilling within the "window" would prove unsafe and not cost effective.

Attached hereto is a plat as required by the Commissions rules and regulations.

If no objections are filed, the applicant requests that this application be approved. If objections are filed, applicant requests the matter be set for hearing and that it be advised of the hearing date.

Respectfully submitted,

Wolverine Gas & Oil Company of Utah, LLC

By



Shawn Burd

Authorized Agent

RECEIVED
MAY 17 2004
DIV. OF OIL, GAS & MINING

WESTERN LAND SERVICES, INC.

54 W. Seymour Street • Sheridan, Wyoming 82801 • Phone: (307) 673-1817 • Fax: (307) 673-1823

Web: www.westernls.com • E-mail: wlswest@westernls.com



OLENE S. WALKER
Governor
GAYLE F. McKEACHNIE
Lieutenant Governor

State of Utah
DEPARTMENT OF NATURAL RESOURCES
Division of Water Rights

ROBERT L. MORGAN
Executive Director

JERRY D. OLDS
State Engineer/Division Director

April 12, 2004

Kings Meadow Ranches
C/O Mack Dastrup
P.O. Box 570125
Sigurd, UT 84657

RE: TEMPORARY CHANGE APPLICATION
#28851

Dear Sir:

The above numbered Temporary Change Application has been approved subject to prior rights and the following condition:

- ♦ The total amount of water diverted from Kings Meadow Creek will be limited to 14.0 acre-feet of water for uses associated with gas well drilling from May 30, 2004 to May 30, 2005. The historically irrigated land totaling 4.667 acres will not be irrigated.

Copies are herewith returned to you for your records and future reference.

Sincerely,

Kirk Forbush, P.E.
Regional Engineer
for Jerry Olds, State Engineer

JO/KF/cr
enclosure

APPLICATION FOR TEMPORARY CHANGE OF WATER

DIVISION OF WATER RIGHTS Rec. by KF
Fee Paid \$ 75.00

STATE OF UTAH

APR 7 2004 Receipt # 04-01540

RICHFIELD AREA

Microfilmed _____

Roll # _____

Cl # 2516

For the purpose of obtaining permission to make a temporary change of water in the State of Utah, application is hereby made to the State Engineer, based upon the following showing of facts, submitted in accordance with the requirements of Section 73-3-3 Utah Code Annotated 1953, as amended.

*WATER RIGHT NO. 63 2529 *APPLICATION NO. 28851

Changes are proposed in (check those applicable)

☒ point of diversion. ☒ place of use. ☒ nature of use. ☒ period of use.

1. OWNER INFORMATION

Name: Kings Meadow Ranches - Evan Dastrup *Interest: _____%

Address: P.O. Box 116

City: Sigurd State: Utah Zip Code: 84657

2. *PRIORITY OF CHANGE: 4/7/04 *FILING DATE: 4/7/04

3. RIGHT EVIDENCED BY: A Portion 63-2529

Prior Approved Temporary Change Applications for this right: _____

***** HERETOFORE *****

4. QUANTITY OF WATER: _____ cfs and/or 14 ac-ft.

5. SOURCE: Kings Meadow Creek

6. COUNTY: Sevier

7. POINT(S) OF DIVERSION: S 1,011', E 1,711' from NW corner of
Section 28, T23S, RLW

Description of Diverting Works: Kings Meadow Creek

8. POINT(S) OF REDIVERSION

The water has been rediverted from _____ at a point: _____

Description of Diverting Works: _____

9. POINT(S) OF RETURN

The amount of water consumed is _____ cfs or _____ ac-ft.

The amount of water returned is _____ cfs or _____ ac-ft.

The water has been returned to the natural stream/source at a point(s): _____

*These items are to be completed by the Division of Water Rights.

Temporary Change

10. NATURE AND PERIOD OF USE

Irrigation: From 04/01 to 10/31
Stockwatering: From 01/01 to 12/31
Domestic: From 01/01 to 12/31
Municipal: From _____ to _____
Mining: From _____ to _____
Power: From _____ to _____
Other: From _____ to _____

11. PURPOSE AND EXTENT OF USE

Irrigation: 4.667 acres. Sole supply of _____ acres.
Stockwatering (number and kind): _____
Domestic: _____ Families and/or _____ Persons.
Municipal (name): _____
Mining: _____ Mining District in the _____ Mine.
Ores mined: _____
Power: Plant name: _____ Type: _____ Capacity: _____
Other (describe): _____

12. PLACE OF USE

Legal description of place of use by 40 acre tract(s): Section 20, T23S, R1W, SE/4, SLBM

13. STORAGE

Reservoir Name: _____ Storage Period: from _____ to _____
Capacity: _____ ac-ft. Inundated Area: _____ acres.
Height of dam: _____ feet.
Legal description of inundated area by 40 tract(s): _____

***** THE FOLLOWING CHANGES ARE PROPOSED *****

14. QUANTITY OF WATER: _____ cfs and/or 14 ac-ft.

15. SOURCE: Kings Meadow Creek

Balance of the water will be abandoned: _____, or will be used as heretofore: _____

16. COUNTY: Sevier

17. POINT(S) OF DIVERSION: S 869', W 1,901' from SW corner of Section 17,
T23S, R1W, SL3M

Description of Diverting Works: _____
*COMMON DESCRIPTION: _____

18. POINT(S) OF REDIVERSION

The water will be rediverted from _____ at a point: _____

Description of Diverting Works: _____

19. POINT(S) OF RETURN

The amount of water to be consumed is _____ cfs or _____ ac-ft.
The amount of water to be returned is _____ cfs or _____ ac-ft.
The water will be returned to the natural stream/source at a point(s): _____

20. NATURE AND PERIOD OF USE

Irrigation: From ____/____/____ to ____/____/____
 Stockwatering: From ____/____/____ to ____/____/____
 Domestic: From ____/____/____ to ____/____/____
 Municipal: From ____/____/____ to ____/____/____
 Mining: From ____/____/____ to ____/____/____
 Power: From ____/____/____ to ____/____/____
 Other: From 05 / 30 / 04 to 05 / 30 / 05

21. PURPOSE AND EXTENT OF USE

Irrigation: _____ acres. Sole supply of _____ acres.
 Stockwatering (number and kind): _____
 Domestic: _____ Families and/or _____ Persons.
 Municipal (name): _____
 Mining: _____ Mining District at the _____ Mine.
 Ores mined: _____
 Power: Plant name: _____ Type: _____ Capacity: _____
 Other (describe): Use water for gas well drilling

22. PLACE OF USE

Legal description of place of use by 40 acre tract(s): Section 17, T23S, R1W, SE/SW, SLBM

23. STORAGE

Reservoir Name: _____ Storage Period: from _____ to _____
 Capacity: _____ ac-ft. Inundated Area: _____ acres.
 Height of dam: _____ feet.
 Legal description of inundated area by 40 tract(s): _____

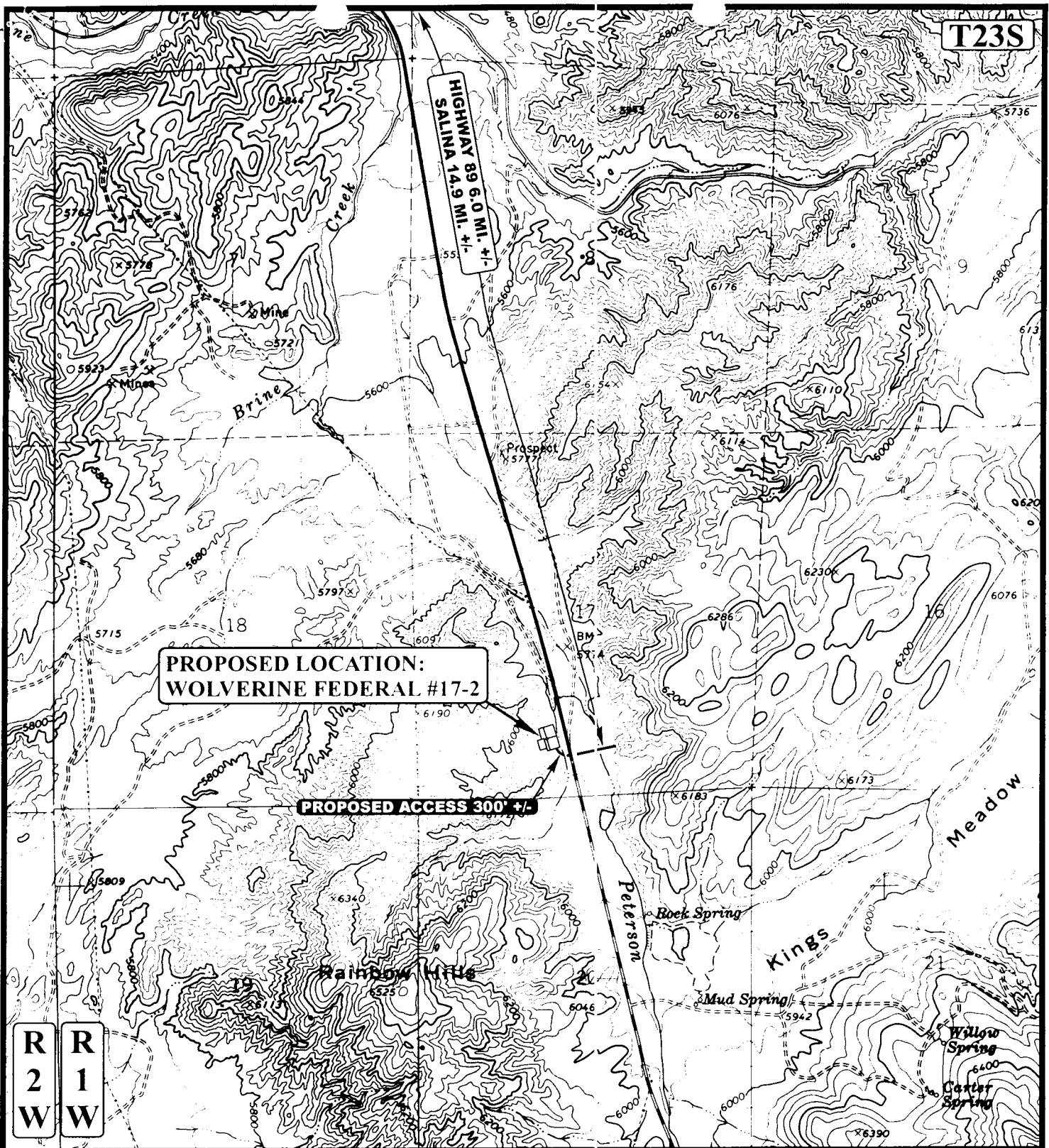
24. EXPLANATORY

The following is set forth to define more clearly the full purpose of this application. Include any supplemental water rights used for the same purpose. (Use additional pages of same size if necessary):

<u>Mack Dastrup (435) 896-5206</u>	<u>Kenneth Dastrup (435) 896-8759</u>
<u>P.O. Box 570125</u>	<u>P.O. Box 570056</u>
<u>Sigurd, Utah 84657</u>	<u>Sigurd, Utah 84657</u>

The undersigned hereby acknowledges that even though he/she/they may have been assisted in the preparation of the above-numbered application through the courtesy of the employees of the Division of Water Rights, all responsibility for the accuracy of the information contained herein, at the time of filing, rests with the applicant(s).

Mack Dastrup
 Signature of Applicant(s)



LEGEND:

— EXISTING ROAD
 - - - PROPOSED ACCESS ROAD



Utah Engineering & Land Surveying
 85 South 200 East Vernal, Utah 84078
 (435) 789-1017 * FAX (435) 789-1813



WOLVERINE GAS & OIL CORP.

WOLVERINE FEDERAL #17-2
 SECTION 17, T23S, R1W, S.L.B.&M.
 869' FSL 1901' FWL

TOPOGRAPHIC
 MAP

03 10 04
 MONTH DAY YEAR

SCALE: 1" = 2000' DRAWN BY: P.M. REVISED: 03-11-04





State of Utah

Department of
Natural Resources

ROBERT L. MORGAN
Executive Director

Division of
Oil, Gas & Mining

LOWELL P. BRAXTON
Division Director

OLENE S. WALKER
Governor

GAYLE F. McKEACHNIE
Lieutenant Governor

May 17, 2004

Wolverine Gas and Oil Company of Utah, LLC
One Riverfront Plaza, 55 Campau NW
Grand Rapids, MI 49503-2616

Re: Wolverine Federal 17-2 Well, 869' FSL, 1901' FWL, SE SW, Sec. 17,
T. 23 South, R. 1 West, Sevier County, Utah

Gentlemen:

Pursuant to the provisions and requirements of Utah Code Ann. § 40-6-1 *et seq.*, Utah Administrative Code R649-3-1 *et seq.*, and the attached Conditions of Approval, approval to drill the referenced well is granted.

Appropriate information has been submitted to DOGM and administrative approval of the requested exception location is hereby granted.

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date. The API identification number assigned to this well is 43-041-30031.

Sincerely,

John R. Baza
Associate Director

pab
Enclosures

cc: Sevier County Assessor
Bureau of Land Management, Moab District Office

Operator: Wolverine Gas and Oil Company of Utah, LLC
Well Name & Number Wolverine Federal 17-2
API Number: 43-041-30031
Lease: UTU-73528
Location: SE SW Sec. 17 T. 23 South R. 1 West

Conditions of Approval

1. General

Compliance with the requirements of Utah Admin. R. 649-1 *et seq.*, the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for permit to drill.

2. Notification Requirements

Notify the Division within 24 hours of spudding the well.

- Contact Carol Daniels at (801) 538-5284.

Notify the Division prior to commencing operations to plug and abandon the well.

- Contact Dan Jarvis at (801) 538-5338

3. Reporting Requirements

All required reports, forms and submittals will be promptly filed with the Division, including but not limited to the Entity Action Form (Form 6), Report of Water Encountered During Drilling (Form 7), Weekly Progress Reports for drilling and completion operations, and Sundry Notices and Reports on Wells requesting approval of change of plans or other operational actions.

4. State approval of this well does not supersede the required federal approval, which must be obtained prior to drilling.

5. This proposed well is located in an area for which drilling units (well spacing patterns) have not been established through an order of the Board of Oil, Gas and Mining (the "Board"). In order to avoid the possibility of waste or injury to correlative rights, the operator is requested, once the well has been drilled, completed, and has produced, to analyze geological and engineering data generated therefrom, as well as any similar data from surrounding areas if available. As soon as is practicable after completion of its analysis, and if the analysis suggests an area larger than the quarter-quarter section upon which the well is located is being drained, the operator is requested to seek an appropriate order from the Board establishing drilling and spacing units in conformance with such analysis by filing a Request for Agency Action with the Board.

010

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

FORM 9

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

1. TYPE OF WELL OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> OTHER <input type="checkbox"/>		5. LEASE DESIGNATION AND SERIAL NUMBER: UTU-73528
2. NAME OF OPERATOR: Wolverine Gas & Oil Company of Utah, LLC		6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
3. ADDRESS OF OPERATOR: 301 S. 100 E. CITY Richfield STATE UT ZIP 84701		7. UNIT or CA AGREEMENT NAME: Wolverine Fed. Exploration Unit
4. LOCATION OF WELL FOOTAGES AT SURFACE: 830' FSL & 1,910' FWL 418902 X 38.79728 429448 Y -111.93386 QTR/QR, SECTION, TOWNSHIP, RANGE, MERIDIAN: SESW 17 23S R1W S		8. WELL NAME and NUMBER: Wolverine Federal #17-2
5. PHONE NUMBER: (435) 896-1943		9. API NUMBER: 4304130031
6. FIELD AND POOL, OR WILDCAT: Exploratory		10. COUNTY: Sevier STATE: UTAH

CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
<input checked="" type="checkbox"/> NOTICE OF INTENT (Submit in Duplicate) Approximate date work will start: 6/16/2004	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> REPERFORATE CURRENT FORMATION
<input type="checkbox"/> SUBSEQUENT REPORT (Submit Original Form Only) Date of work completion:	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> SIDETRACK TO REPAIR WELL
	<input type="checkbox"/> CASING REPAIR	<input type="checkbox"/> NEW CONSTRUCTION	<input type="checkbox"/> TEMPORARILY ABANDON
	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> TUBING REPAIR
	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> VENT OR FLARE
	<input type="checkbox"/> CHANGE WELL NAME	<input type="checkbox"/> PLUG BACK	<input type="checkbox"/> WATER DISPOSAL
	<input checked="" type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> PRODUCTION (START/RESUME)	<input type="checkbox"/> WATER SHUT-OFF
	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> OTHER:
	<input type="checkbox"/> CONVERT WELL TYPE	<input type="checkbox"/> RECOMPLETE - DIFFERENT FORMATION	

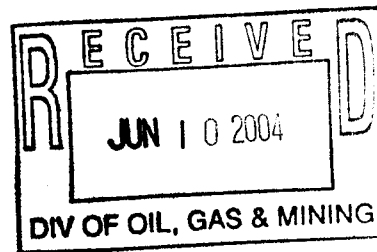
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

Wolverine Gas & Oil Company of Utah, LLC (Wolverine) proposes to move the Wolverine Federal #17-2 well location to the South bearing the following coordinates: 830' FSL & 1,910' FWL with a grade elevation of 5,774 feet. Wolverine would also like to extend the length of the reserve pit ten (10) feet to the North in relation to the existing rig layout design. Moving the Wolverine Federal #17-2 well and extending the reserve pit will allow for better alignment of the already permitted Wolverine Federal #17-2 well and any other future wells.

* Approximate date work will start is on or about June 16, 2004.

Approved by the
Utah Division of
Oil, Gas and Mining

Date: 06-15-04
By: [Signature]



NAME (PLEASE PRINT) Shawn Burd

TITLE Authorized Agent

SIGNATURE [Signature]

DATE

6/10/04

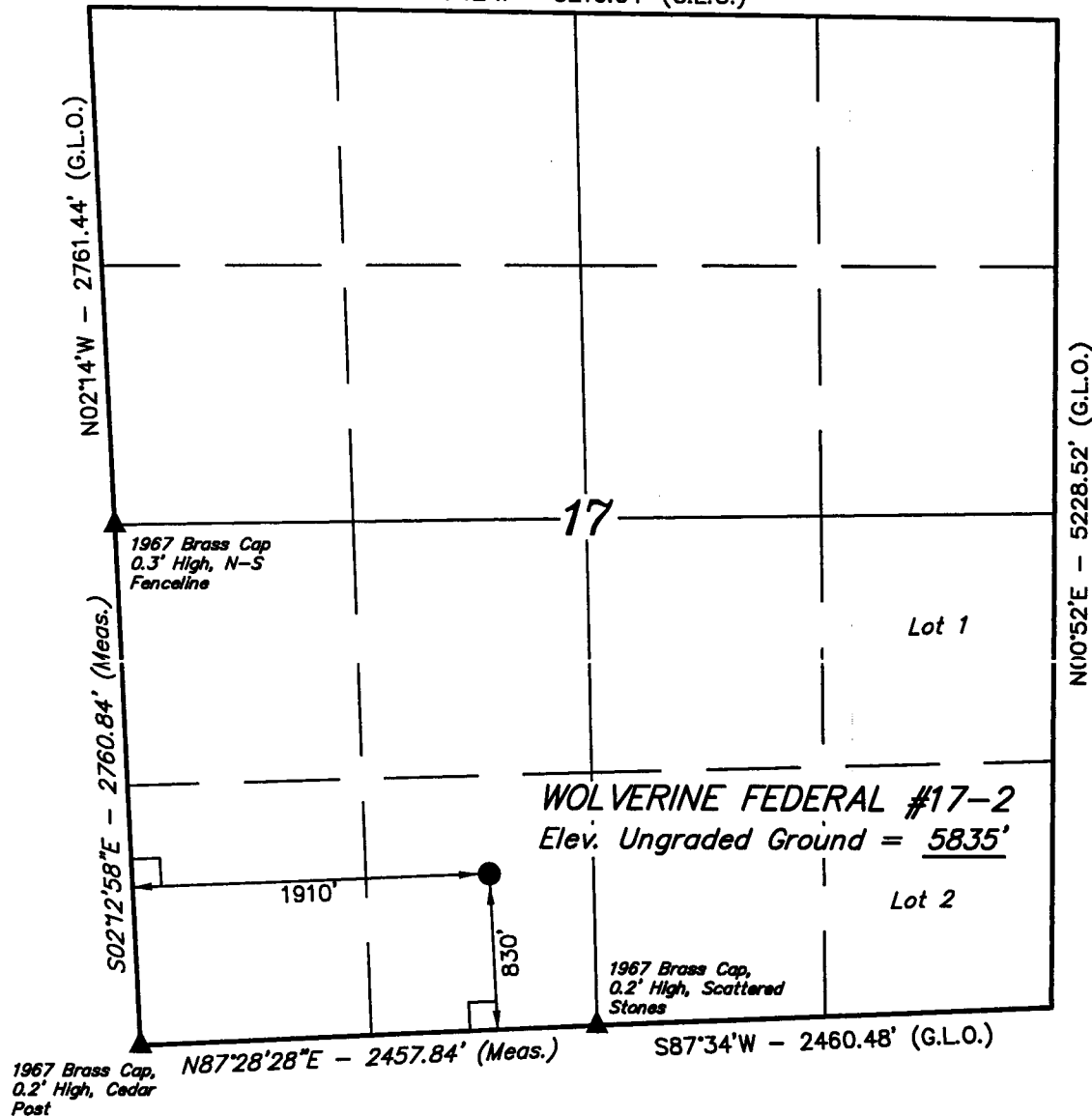
(This space for State use only)

Federal Approval of this
Action is Necessary

COPY SENT TO OPERATOR
Date: 6-18-04
Initials: CHD

T23S, R1W, S.L.B.&M.

N89°12'W - 5210.04' (G.L.O.)



LEGEND:

- └─┘ = 90° SYMBOL
- = PROPOSED WELL HEAD.
- ▲ = SECTION CORNERS LOCATED.

BASIS OF BEARINGS

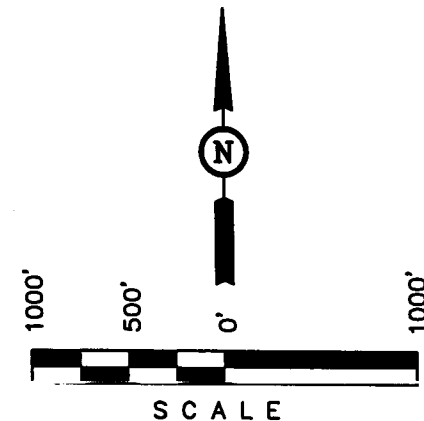
BASIS OF BEARINGS IS A G.P.S. OBSERVATION.
(AUTONOMOUS NAD 83)
LATITUDE = 38°47'51.07" (38.797519)
LONGITUDE = 111°56'05.24" (111.934789)

WOLVERINE GAS & OIL CORP.

Well location, WOLVERINE FEDERAL #17-2, located as shown in the SE 1/4 SW 1/4 of Section 17, T23S, R1W, S.L.B.&M., Sevier County, Utah.

BASIS OF ELEVATION

SPOT ELEVATION LOCATED NEAR A ROAD IN THE SW 1/4 OF SECTION 17, T23S, R1W, S.L.B.&M., TAKEN FROM THE SIGURD QUADRANGLE, UTAH, SEVIER COUNTY, 7.5 MINUTE SERIES (TOPOGRAPHICAL MAP) PUBLISHED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY. SAID ELEVATION IS MARKED AS BEING 5774 FEET.



CERTIFICATE

THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

REGISTERED LAND SURVEYOR
REGISTRATION NO. 161318
STATE OF UTAH

REVISED: 5-27-04

UINTAH ENGINEERING & LAND SURVEYING
85 SOUTH 200 EAST - VERNAL, UTAH 84078
(435) 789-1017

SCALE 1" = 1000'	DATE SURVEYED: 3-4-04	DATE DRAWN: 3-10-04
PARTY G.O. D.J. C.G.	REFERENCES G.L.O. PLAT	
WEATHER COOL	FILE WOLVERINE GAS & OIL CORP.	

CONFIDENTIAL

DIVISION OF OIL, GAS AND MINING**SPUDDING INFORMATION**Name of Company: WOLVERINE GAS & OIL COMPANY UTWell Name: WOLVERINE FED 17-2Api No: 43-041-30031 Lease Type: FEDERALSection 17 Township 23S Range 01W County SEVIERDrilling Contractor CDDT RIG # 10**SPUDDED:**Date 07/02//04Time 8:00 AMHow ROTARY**Drilling will commence:** _____Reported by DAVID SPITZTelephone # 1-918-645-6671Date 07/02/2004 Signed CHD

CONFIDENTIAL

FORM 9

012

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

1. TYPE OF WELL OIL WELL <input type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <u>Drilling Well</u>		5. LEASE DESIGNATION AND SERIAL NUMBER: UTU-73528
2. NAME OF OPERATOR: Wolverine Gas and Oil of Utah, LLC		6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
3. ADDRESS OF OPERATOR: 55 Campau, NW CITY Grand Rapids STATE MI ZIP 49203		7. UNIT or CA AGREEMENT NAME: Wolverine Fed Exploration Unit
4. LOCATION OF WELL FOOTAGES AT SURFACE: 830' FSL & 1901' FWL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: SESW 17 23S 01W		8. WELL NAME and NUMBER: Wolverine Federal 17-2
PHONE NUMBER: (616) 458-1150		9. API NUMBER: 43-041-30031
		10. FIELD AND POOL, OR WILDCAT: Covenant Field
		COUNTY: Sevier
		STATE: UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA			
TYPE OF SUBMISSION	TYPE OF ACTION		
<input type="checkbox"/> NOTICE OF INTENT (Submit in Duplicate) Approximate date work will start: _____	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> REPERFORATE CURRENT FORMATION
	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> SIDETRACK TO REPAIR WELL
	<input type="checkbox"/> CASING REPAIR	<input type="checkbox"/> NEW CONSTRUCTION	<input type="checkbox"/> TEMPORARILY ABANDON
	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> TUBING REPAIR
	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> VENT OR FLARE
<input checked="" type="checkbox"/> SUBSEQUENT REPORT (Submit Original Form Only) Date of work completion: 7/4/2004	<input type="checkbox"/> CHANGE WELL NAME	<input type="checkbox"/> PLUG BACK	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> PRODUCTION (START/RESUME)	<input type="checkbox"/> WATER SHUT-OFF
	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input checked="" type="checkbox"/> OTHER: <u>report of drilling progress</u>
	<input type="checkbox"/> CONVERT WELL TYPE	<input type="checkbox"/> RECOMPLETE - DIFFERENT FORMATION	

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

PLEASE KEEP THE ENCLOSED INFORMATION CONFIDENTIAL - THANK YOU

Spud & Surface Casing Report

Well Spud 09:00 7/2/04

TD 12-1/4" hole @ 1542' kb @ 17:30 7/3/04

Run 35 jts 9.625" od 36ppf J55 STC 8rd new casing; shoe @ 1542, FC @ 1498

Halco cemented with 360 sx 65:35:6 (12.8ppg;1.78cfps) & 280 sx Type 5 (15.6ppg,1.18cfps)

Job complete 13:00 7/4/04

NAME (PLEASE PRINT) <u>Steven R. Hash - EXACT Engrg (918) 599-9400</u>	TITLE <u>Consultant & Agent for Wolverine Gas & Oil</u>
SIGNATURE <u>Steven R. Hash</u>	DATE <u>7/6/2004</u>

(This space for State use only)

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013

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

FORM 8

ENTITY ACTION FORM

Operator: Wolverine Gas and Oil Company of Utah, LLC
 Address: 55 Campau NW, One Riverfront Plaza
city Grand Rapids
state MI zip 49503-2618

Operator Account Number: N 1655
 Phone Number: (616) 458-1150

Well 1

API Number	Well Name		QQ	Sec	Twp	Rng	County
4304130031	Wolverine Federal 17-2		SESW	17	23S	1W	Sevier
Action Code	Current Entity Number	New Entity Number	Spud Date		Entity Assignment Effective Date		
<i>XB</i>	<i>99999</i>	<i>13995</i>	<i>7/2/2004</i>		<i>7/21/04</i>		
Comments: <i>NAVA</i> CONFIDENTIAL							

Well 2

API Number	Well Name		QQ	Sec	Twp	Rng	County
Action Code	Current Entity Number	New Entity Number	Spud Date		Entity Assignment Effective Date		
Comments:							

Well 3

API Number	Well Name		QQ	Sec	Twp	Rng	County
Action Code	Current Entity Number	New Entity Number	Spud Date		Entity Assignment Effective Date		
Comments:							

ACTION CODES:

- A - Establish new entity for new well (single well only)
- B - Add new well to existing entity (group or unit well)
- C - Re-assign well from one existing entity to another existing entity
- D - Re-assign well from one existing entity to a new entity
- E - Other (Explain in 'comments' section)

Timothy J. Brock

Name (Please Print)

Signature

Manager-Engineering

Title

7/20/2002

Date

(5/2000)

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014

EXACT Engineering, Inc.

www.exactengineering.com

415 S. Boston Ave., Suite 734, Tulsa, OK 74103 • (918) 599-9400 • (918) 599-9401 (fax)

Steven R. Hash, P.E.
Registered Professional Engineer
stevehash@exactengineering.com

CONFIDENTIAL

August 13, 2004

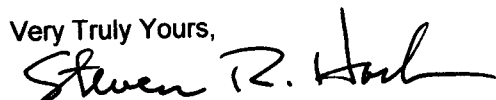
Mr. Dustin Doucet
Utah Division of Oil, Gas & Mining
1594 West North Temple, Suite 1210
Salt Lake City, UT 84114-5801

Re: **Wolverine Federal 17-2 well**
Sec 17 T23S R01W
Sevier Co., UT
API# 43-041-30031

Dear Mr. Doucet,

On behalf of Wolverine Gas and Oil Company of Utah, LLC, please find enclosed daily activity reports for the subject well for the month of **July 2004**. Wolverine respectfully request that this information remain confidential for the maximum period allowed. As always, please contact either Wolverine or me if there are further questions.

Very Truly Yours,



Steven R. Hash
Agent for Wolverine Gas and Oil Company of Utah, LLC

Copies with attachments via email to:
Wolverine – Gary Bleeker, Richard Moritz, Sue Benson, Sid Jansma, Jr., Tim Brock
EXACT Engineering – well file

RECEIVED
AUG 18 2004
DIV. OF OIL, GAS & MINING

Petroleum Engineering Consulting, Personnel & Jobsite Supervision
complete well design, construction & management, drilling, completion, production, pipelines, appraisals,
due diligence, acquisitions, procedures, temporary personnel and field supervision

(918) 599-9400

Operator: Wolverine G&O Co of Utah, LLC

DAILY DRILLING REPORT

APH# 43-041-30031

Operator: Wolverine Gas Co of Utah, LLC									
DATE	WELL	CONTRACTOR	COUNTY, STATE	SPUD DATE	AFE	SUPERVISOR			
07/01/04	Wolverine Federal 17-2	CCDT Rig#10	Sevier, UT			David Spitz			
DAYS F/ SPUD	PRESENT OPERATIONS		TOTAL DEPTH	PROGRESS	D RILLING TIME	ROP	FORMATION	AUTH. DEPTH	
	Rigging up		80'			#DIV/0!			

MUD DATA

[illegible]

BT DATA

BIT NO.	SIZE	MFG.	TYPE	IADC CODE	SERIAL NO.	JETS (1/32nd") or TFA			IN	OUT	FOOT/GE	HOURS	ROP	MTR	RPM RT+MTR	WOB	DULL CONDITION		
																	T	B	G
													#DIV/0!						
													#DIV/0!						
													#DIV/0!						
													#DIV/0!						

HYDRAULICS

[illegible]

SLOW PUMP

HYDRAULICS										HHP / IN²	ECD	60 spm	80 spm	100 spm
PUMP NO.	MANUFACTURER	LINER	STROKE LENGTH	GAL / STK	SPM	GPM	AV DP	AV DC	PUMP PRESS.	MTR DIF PRESS.				
1						0						1		
2						0						2		
Both				0	0	0								

DRILL STRING

BOTTOMHOLE ASSEMBLY		LENGTH	O.D.	I.D.	FORMATION	MD	TVD	LITHOLOGY	RIG INFO	
									Rig No	
									Cell No	
									Last BOP Test	
									Next BOP Test	
									Last Safety Meeting	
									Last BOP Drill	
									Last Operate Pipe Ram	
									Last Operate Blind Ram	
									Last Operate Annular	
Total BHA:		0.00								
STRING WT.	BHA WT.	PU WT.	SO WT.	ROT. TORQUE	GRD. ELEVATION	GL TO KB	KB ELEVATION	INTERMEDIATE CSG	LAST CASING	NEXT CASING

GEORGIC

GENERAL INFO

SURVEYS

[illegible]

DAILY ACTIVITY

[illegible]

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AUG 18 2004

DIV. OF OIL, GAS & MINING

COST DATA

DAILY DRILLING REPORT

APH# 43-041-30031

DATE		WELL		CONTRACTOR		COUNTY, STATE		SPUD DATE		AFE		SUPERVISOR	
07/02/04		Wolverine Federal 17-2		CDDT Rig#10		Sevier, UT						David Spitz	
DAYS F/ SPUD		PRESENT OPERATIONS		TOTAL DEPTH		PROGRESS		D RILLING TIME		ROP		FORMATION AUTH. DEPTH	
		Rigging up		80'						#DIV/0!			

NUD DATA

[illegible]

BIT DATA

BIT NO.	SIZE	MFG.	TYPE	IADC CODE	SERIAL NO.	JETS (1/32nd) or TFA			IN	OUT	FOOT/GE	HOURS	ROP	MTR	RPM RT+MTR	WOB	DULL CONDITION		
																	T	B	G
													#DIV/0!						
													#DIV/0!						
													#DIV/0!						
													#DIV/0!						

HYDRAULICS

PUMP NO.	MANUFACTURER	LINER	STROKE LENGTH	GAL / STK	SPM	GPM	AV DP	AV DC	PUMP PRESS.	MTR DF PRESS.
1						0				
2						0				
Both				0	0	0				

SLOW PUMP

	MHP / in ²	ECD	SPM		
			60 spm	80 spm	100 spm
1					
2					

DRILL STRING

[illegible]**GEOL 5GTC**

FORMATION	MD	TVD	LITHOLOGY
BOTTOMS UP TIME	BG GAS	GAS D IYA C INN GAS	TRIP GAS
		SHOWS	
GAS UNITS	FROM	TO	ROP (FTHR)
GRD. ELEVATION	GL TO KB	KB ELEVATION	INTERMEDIATE CSG

GENERAL INFO

RIG INFO	
Rig No	
Cell Nc	
Last BOP Test	
Next BOP Test	
Last Safety Meeting	
Last BOP Drill	
Last Operate Pipe Ram	
Last Operate Blind Ram	
Last Operate Annular	
LAST CASING	NEXT CASING

SURVEYS

[illegible]

DAILY ACTIVITY

FROM	TO	HRS	LAST 24 HOURS:
6:00	3:00	21.00	Stand up derrick & level. Rig up floor. Install drilling spool & hydrill. Weld on & make up bell nipple & flowline
3:00	6:00	3.00	Re drill rat hole and mousehole. PU bit & BH assembly.
6:00			Will spud next hour.
0:00			
0:00			
0:00			
0:00			
0:00			
0:00			
0:00			
0:00			
0:00			
0:00			
0:00			
0:00			
0:00			
0:00			Fuel usage 300 gals
0:00			
0:00			
0:00			
0:00			
Daily Total		24.00	

COST DATA

APH# 43-041-30031

COST DATA

Engineering & Supervision

EXACT Engineering, Inc.

(918) 599-9400

Operator: Wolverine G&O Co of Utah, LLC

DAILY DRILLING REPORT

API# 43-041-30031

DATE	WELL	CONTRACTOR	COUNTY, STATE	SPUD DATE	AFE	SUPERVISOR	
07/04/04	Wolverine Federal 17-2	CDDT Rig#10	Sevier, UT	07/02/04		David Spitz	
DAYS F/ SPUD	PRESENT OPERATIONS	TOTAL DEPTH	PROGRESS	DRILLING TIME	ROP	FORMATION	AUTH. DEPTH
2	Rigging up casing crew	1,542	562	11.00	51.0	Arapien	6,600

MUD DATA

WT	VIS.	WL	CK	PH	SAND	SOLIDS %	PV	YP	GELS	DEPTH	DATE/TIME	CHLORIDES	CALCIUM	MBT	SALT PPM
9.3	34	42.0		9.0	tr	7.0	8	8	6/11	1542	7/3 6:30 PM	1,000	400		1,650

BIT DATA

BIT NO.	SIZE	MFG.	TYPE	IADC CODE	SERIAL NO.	JETS (1/32nd) or TFA	IN	OUT	FOOTAGE	HOURS	ROP	MTR	RPM	WOB	DULL CONDITION		
													RT+MTR		T	B	G
1	12-1/4"	SDBS	XL-12	437	742785	0.96	80	1542	1462	29.00	50.4	0.28	184	42			
											#DIV/0!						
											#DIV/0!						
											#DIV/0!						

HYDRAULICS

PUMP NO.	MANUFACTURER	LINER	STROKE LENGTH	GAL / STK	SPM	GPM	AV DP	AV DC	PUMP PRESS.	MTR DFI PRESS.	HHP / IN ²	ECD	SLOW PUMP		
													60 spm	80 spm	100 spm
1	Wilson 600	5"	14	4.03	72	290							1		
2	Wilson 600	5"	14	4.03	74	298							2		
Both				8.06	146	588	122	139	1330	200	168	9.5			

DRILL STRING

GEOLOGIC

GENERAL INFO

BOTTOMHOLE ASSEMBLY	LENGTH	O.D.	I.D.	FORMATION	MD	TVD	LITHOLOGY	RIG INFO	
Bit	1.50	12.250						Rig No	
Motor & Xover	31.39	9.625						Cell No	(918) 645-6671
Monel DC	31.45	7.750	2.500					Last BOP Test	
MWD	5.09	7.750						Next BOP Test	
FS, SS, Xover	13.00	7.750	2.500					Last Safety Meeting	
8" DC (4)	113.34	8.000	2.500					Last BOP Drill	
6" DC (19)	567.50	6.000	2.250					Last Operate Pipe Ram	
4-1/2" DP	789.44	4.500	3.826					Last Operate Blind Ram	
Total BHA:	1,552.71							Last Operate Annular	
STRING WT.	BHA WT.	PU WT.	SO WT.	ROT. TORQUE	GRD. ELEVATION	GL TO KB	KB ELEVATION	INTERMEDIATE CSG	LAST CASING
68	80	75	20		5,835	12	5,847		NEXT CASING

SURVEYS

MD	INCL	AZMUTH	TVD	SECTION	N+/-	E+/-	DLS	TOOL	MD	INCL	AZMUTH	TVD	SECTION	N+/-	E+/-	DLS	TOOL
975	3.80	229.70	974	30.52	-16.11	-30.52	0.32	MWD	1,354	2.10	213.90	1353	41.73	-29.38	-41.73	0.43	MWD
1,164	2.50	220.10	1163	37.74	-24.09	-37.74	0.96	MWD	1,542	2.78	225.21	1541	46.87	-35.50	-46.87	0.46	MWD

DAILY ACTIVITY

FROM	TO	HRS	LAST 24 HOURS:
6:00	12:00	6.00	Drilling 980'-1245', slid 1.0 hrs from 1025'-1037' & 1120'-1135'.
12:00	12:30	0.50	Service Rig
12:30	17:30	5.00	Drilling 1245'-1542' TD surface Hole
17:30	19:00	1.50	Circ & Sweep bottoms up. Bottoms up in 20 min.
19:00	23:30	4.50	Trip out and laydown directional tools
23:30	2:00	1.50	TIH. Tight spots having to ream to bottom.
2:00	4:00	2.00	Circulate. Spot 100 bbl pill
4:00	6:00	2.00	TOH.
6:00			
0:00			
0:00			
0:00			
0:00			
0:00			
0:00			
0:00			
0:00			Mud usage 106 sxs gel, 12 sx anco drill, 4 sx caustic soda,
0:00			
0:00			
0:00			
Daily Total	23.00		

COST DATA

(918) 599-9400

Operator: Wolverine G&O Co of Utah, LLC

DAILY DRILLING REPORT

API# 43-041-30031

Operator: Wolverine Gas Co of Utah, LLC									
DATE	WELL	CONTRACTOR	COUNTY, STATE	SPUD DATE	AFE	SUPERVISOR			
07/05/04	Wolverine Federal 17-2	CCDT Rig#10	Sevier, UT	07/02/04		David Spitz			
DAYS F/ SPUD	PRESENT OPERATIONS	TOTAL DEPTH	PROGRESS	DRILLING TIME	ROP	FORMATION	AUTH. DEPTH		
3	NU BOP	1,542	0	0.00	0.0	Arapien	6,600		

MUD DATA

[illegible]

BIT DATA

BIT DATA															DULL CONDITION				
BIT NO.	SIZE	MFG.	TYPE	IADC CODE	SERIAL NO.	JETS (1/32nd") or TFA			IN	OUT	FOOTAGE	HOURS	ROP	MTR	RPM RT-MTR	WOB	T	B	G
1	12-1/4"	SDBS	XL-12	437	742785		0.96		80	1542	1462	29.00	50.4	Y	40/164	42	1.2	1	1/16"
													#DIV/0!						
													#DIV/0!						
													#DIV/0!						

HYDRAULICS

PUMP NO.	MANUFACTURER	LINER	STROKE LENGTH	GAL / STK	SPM	GPM	AV DP	AV DC	PUMP PRESS.	MTR DIFF PRESS.	HHP / IN ²	ECD	60 spm	80 spm	100 spm	
1	Wilson 600	5"	14	4.03	72	290							1			
2	Wilson 600	5"	14	4.03	74	298							2			
Roth				8.06	146	588	122	139	1330	200	168	9.5				

SLOW PUMP

	60 spm	80 spm	100 spm
1			
2			

DRILL STRING

DRILL STRING								RIG INFO	
BOTTOMHOLE ASSEMBLY	LENGTH	O.D.	I.D.	FORMATION	MD	TVD	LITHOLOGY	Rig No	Cell Nc (918) 645-667
								Last BOP Test	
				BOTTOMS UP TIME	BG GAS	GAS DATA C JNN GAS	TRIP GAS	Next BOP Test	
								Last Safety Meeting	
						SHR WS		Last BOP Drill	
				GAS UNITS	FROM	TO	ROP (FT/HR)	Last Operate Pipe Ran	
								Last Operate Blind Ran	
								Last Operate Annular	
Total BHA:		0.00						LAST CASING	NEXT CASING
STRING WT.	BHA WT.	PU WT.	SO WT.	ROT. TORQUE	GRD. ELEVATION	GL TO KB	KB ELEVATION	INTERMEDIATE CSG	
68	80	75	20		5,835	12	5,847		

GEOLOGIC

GENERAL INFO

SURVEYS

[illegible]

DAILY ACTIVITY

DAILY ACTIVITY			
FROM	TO	HRS	LAST 24 HOURS
6:00	8:00	2.00	Rig up casing crew
8:00	10:00	2.00	Run 35 jts of 9-5/8" 36# J-55 casing 1542' KB. Shoe @ 1542', Float collar @ 1498'.
10:00	10:30	0.50	RD casing crew
10:30	11:30	1.00	RU Halliburton, Held Safety meeting.
11:30	13:00	1.50	Cement 9-5/8" casing with 360 sxs of 12.8 ppg lead cement, 280 sxs of 15.6 tail cement. Circ 45 bbls to pit. TOC at surface
13:00	19:30	6.50	WOC and clean pits.
19:30	0:00	4.50	ND 13-5/8" hydrill and spools
0:00	6:00	6.00	NU 11" 5M double rams, 3M hydrill and rotating head.
6:00			
0:00			
0:00			
0:00			
0:00			
0:00			Fuel Usage 210 gals
0:00			Mud usage 10 sxs gel
0:00			
0:00			Daily Drilling Cost includes \$85,000 Rig mobilization charge.
Daily Total		24.00	

COST DATA

Engineering & Supervision

EXACT Engineering, Inc.

(918) 599-9400

Operator: Wolverine G&O Co of Utah, LLC

DAILY DRILLING REPORT

API# 43-041-30031

DATE	WELL	CONTRACTOR	COUNTY, STATE	SPUD DATE	AFE	SUPERVISOR	
07/06/04	Wolverine Federal 17-2	CDDT Rig#10	Sevier, UT	07/02/04		David Spitz	
DAYS F/SPUD	PRESENT OPERATIONS	TOTAL DEPTH	PROGRESS	D RILLING TIME	ROP	FORMATION	AUTH. DEPTH
4	Waiting on Hydril	1,542	0	0.00	0.0	Arapien	6,600

MUD DATA

WT	VIS.	WL	CK	PH	SAND	SOLIDS %	PV	YP	GELS	DEPTH	DATE/TIME	CHLORIDES	CALCIUM	MBT	SALT PPM

BIT DATA

BIT NO.	SIZE	MFG.	TYPE	IADC CODE	SERIAL NO.	JETS (1/32nd) or TFA	IN	OUT	FOOT/GE	HOURS	ROP	MTR	RPM	WOB	DULL CONDITION
1	12-1/4"	SDBS	XL-12	437	742785	0.96	80	1542	1462	29.00	50.4	Y	40/164	42	1.2 1 1/16"
2	8-3/4"	SDBS	X530S		10383994	15 15 15	1542				#DIV/0!				
											#DIV/0!				
											#DIV/0!				

HYDRAULICS

PUMP NO.	MANUFACTURER	LINER	STROKE LENGTH	GAL / STK	SPM	GPM	AV DP	AV DC	PUMP PRESS.	MTR DPL PRESS.	RHP / IN ²	ECD	60 spm	80 spm	100 spm
1	Wilson 600	5"	14	4.03	72	290							1		
2	Wilson 600	5"	14	4.03	74	298							2		
Both				8.06	146	588	122	139	1330	200	168	9.5			

SLOW PUMP

DRILL STRING				GEOLOGIC				GENERAL INFO			
BOTTOMHOLE ASSEMBLY	LENGTH	O.D.	I.D.	FORMATION	MD	TVD	LITHOLOGY	RIG INFO			
								Rig No			
								Cell No (918) 645-6671			
								Last BOP Test			
								Next BOP Test			
								Last Safety Meeting			
								Last BOP Drill			
								Last Operate Pipe Ram			
								Last Operate Blind Ram			
								Last Operate Annular			
Total BHA: 0.00								LAST CASING NEXT CASING			
STRING WT.	BHA WT.	PU WT.	SO WT.	ROT. TORQUE	GRD. ELEVATION	GL TO KB	KB ELEVATION	INTERMEDIATE CSG			
68	80	75	20		5,835	12	5,847	1542			

SURVEYS

MD	INCL	AZMUTH	TVD	SECTION	N+ / S-	E+ / W-	DLS	TOOL	MD	INCL	AZMUTH	TVD	SECTION	N+ / S-	E+ / W-	DLS	TOOL

DAILY ACTIVITY

FROM	TO	HRS	LAST 24 HOURS:
6:00	9:00	3.00	NU BOP stack
9:00	15:00	6.00	Wait on BOP tester
15:00	15:30	0.50	Test Upper Kelly valve to 3000 psi OK
15:30	20:00	4.50	Rig repair, replace API ring between below blind ram
20:00	22:00	2.00	Test pipe ram, check valve and, gate valves to 3000 psi OK
22:00	23:30	1.50	Rig repair, replace O ring between hose and choke manifold.
23:30	0:00	0.50	Test choke line to 3000 psi, OK.
0:00	0:30	0.50	Test hydril to 1500 psi, failed
0:30	1:30	1.00	Test blind ram to 3000 psi, OK. Test casing to 1500 psi OK.
1:30	3:00	1.50	Rig Repair, ND Hydril
3:00	6:00	3.00	Rig Repair, Wait on Hydril coming from Rock Springs, WY
6:00			
0:00			
0:00			Fuel Usage 126 gals
0:00			Mud usage 36 sxs ge, 25sxs caustic soda, 6 sxs anco pac, 439 sxs salt, 12 sxs starch, 6 gal flowzan, 1 gal Defoamer
0:00			
0:00			
Daily Total		24.00	

COST DATA

Engineering & Supervision

XACT Engineering, Inc.

(918) 500-9400

Operator: Wolverine G&O Co of Utah, LLC

DAILY DRILLING REPORT

AP# 43-041-30031

DATE 07/07/04	WELL Wolverine Federal 17-2	CONTRACTOR CDDT Rig#10	COUNTY, STATE Sevier, UT	SPUD DATE 07/02/04	AFE	SUPERVISOR David Spitz
DAYS F/SPUD 5	PRESENT OPERATIONS Drilling Ahead @ 1652'	TOTAL DEPTH 1,652	PROGRESS 110	DRILLING TIME 4.50	ROP 24.4	FORMATION Arapien
						AUTH. DEPTH 6,600

MUD DATA

WT	VIS.	WL	CK	PH	SAND	SOLIDS %	PV	YP	GELS	DETH	DATE/TIME	CHLORIDES	CALCIUM	MBT	SALT PPM
10.2		40.0													

BIT DATA

BIT NO.	SIZE	MFG.	TYPE	IADC CODE	SERIAL NO.	JETS (1/32nd) or TFA	IN	OUT	FOOTAGE	HO JRS	ROP	MTR	RPM	WOB	DULL CONDITION
1	12-1/4"	SDBS	XL-12	437	742785	0.96	80	1542	1462	29.00	50.4	Y	40/164	42	1,2 1 1/16"
2	8-3/4"	SDBS	X530S	537	10383994	15 15 15	1542		110	4.50	24.4	Y	35/120	20/25	
											#DIV/0!				
											#DIV/0!				

HYDRAULICS

PUMP NO.	MANUFACTURER	LINER	STROKE LENGTH	GAL / STK	SPM	GPM	AV DP	AV DC	PUMP PRESS.	MTR DIFF PRESS.	HHP / IN ²	ECO	80 spm	80 spm	100 spm
1	Wilson 600	5"	14	4.03	72	290							1		
2	Wilson 600	5"	14	4.03	74	0							2		
Both				8.06	146	290									

SLOW PUMP

DRILL STRING

GEOLOGIC

GENERAL INFO

BOTTOMHOLE ASSEMBLY	LENGTH	O.D.	I.D.	FORMATION	MD	TVD	LITHOLOGY	RIG INFO
Bit	1.00	8.750						Rig No
Motor (1.5 Deg)	26.46	6.500						Cell Nr (918) 645-6671
Dbl Pin XO	1.35	6.250						Last BOP Test
Monel	31.52	6.250	3.000					Next BOP Test
Pulsar	5.86	6.312	3.000					Last Safety Meeting 7/4
Floet sub XO	1.91	6.375	2.500					Last BOP Drill
SS	8.00	6.750	2.250					Last Operate Pipe Ra 7/6
XO	1.29	6.250	2.250					Last Operate Blind Ra 7/6
20 6" DC	589.67	6.000	2.250					Last Operate Annular 7/6
XO	1.34	6.560	2.250					
Hydraulic Jar	32.18	6.250	2.250					
XO	2.73	6.437	2.250					
3 6" DC	91.54	6.000	2.250					
XO	1.80	6.000	2.250					
DP	1,500.00	4.500	3.826					
	1.29							
Total BHA:	77.39							
STRING WT.	BHA WT.	PU WT.	SO WT.	ROY. TORQUE	GRD. ELEVATION	GL TO KB	KB ELEVATION	INTERMEDIATE CSG
75	55	75	48		5,835	12	5,847	NA
								LAST CASING
								6600

SURVEYS

MD	INCL	AZMUTH	TVD	SECTION	N+ / S-	E+ / W-	DLS	TOOL	MD	INCL	AZMUTH	TVD	SECTION	N+ / S-	E+ / W-	DLS	TOOL

DAILY ACTIVITY

FROM	TO	HRS	LAST 24 HOURS:
6:00	10:30	4.50	Rig repair, Waiting on Hydrill
10:30	13:00	2.50	NU Hydrill. Pressure test to 1500 psi OK
13:00	15:30	2.50	NU rotating head and install wear bushing
15:30	19:00	3.50	PU BHA
19:00	19:30	0.50	Wash Kelly down
19:30	20:00	0.50	Install rotating head rubber
20:00	21:30	1.50	Drill out cement
21:30	0:30	3.00	Condition mud
0:30	1:00	0.50	Drilling 1542'-1570'
1:00	2:00	1.00	Clean out under shaker screen
2:00	6:00	4.00	Drilling 1570'-1652'
6:00			
0:00			
0:00			Fuel Usage 126 gals
0:00			Mud usage and mud report will be on tomorrow report
Daily Total	24.00		

COST DATA

Engineering & Supervision

EXACT Engineering, Inc.

(918) 599-9400

Operator: Wolverine G&O Co of Utah, LLC

DAILY DRILLING REPORT

AP# 43-041-30031

DATE	WELL	CONTRACTOR	COUNTY, STATE		SPUD DATE	AFE	SUPERVISOR	
07/09/04	Wolverine Federal 17-2	CCDT Rig#10	Sevier, UT		07/02/04		David Spitz	
DAYS F/ SPUD	PRESENT OPERATIONS		TOTAL DEPTH	PROGRESS	DRILLING TIME	ROP	FORMATION	AUTH. DEPTH
6	Unplugging mwd		2,011	359	10.00	35.9	Arapien	6,600

MUD DATA

WT	VIS	WL	CK	PH	SAND	SOLIDS %	PV	YP	GELS	DEPTH	DATE/TIME	CHLORIDES	CALCIUM	MBT	SALT PPM
9.7	32	8.0	1/32	11.5	0.25	0.5	3	4	2/3	1886	7/7 7:00 PM	165,000	140		

BIT DATA

BIT NO.	SIZE	MFG.	TYPE	IADC CODE	SERIAL NO.	JETS (1/32in) or TFA	IN	OUT	FOOTAGE	HOURS	ROP	MTR	RPM	WOB	DULL CONDITION
1	12-1/4"	SDBS	XL-12	437	742785	0.96	80	1542	1462	29.00	50.4	Y	40/164	42	1.2 1 1/16"
2	8-3/4"	SDBS	X530S	537	10383994	15	15	15	1542	14.50	32.3	Y	35/120	20/25	
											#DIV/0!				
											#DIV/0!				

HYDRAULICS

PUMP NO.	MANUFACTURER	LINER	STROKE LENGTH	GAL./STK	SPM	GPM	AV DP	AV DC	PUMP PRESS.	MTR DIFF. PRESS.	HHP / IN ²	ECD	60 spm	80 spm	100 spm
1	Wilson 600	5"	14	4.03	72	290							1		
2	Wilson 600	5"	14	4.03	74	0							2		
Both				8.06	146	290	186	253	1430	200	168	9.8			

SLOW PUMP

DRILL STRING				GEOLOGIC					GENERAL INFO	
BOTTOMHOLE ASSEMBLY	LENGTH	O.D.	I.D.	FORMATION	MD	TVD		LITHOLOGY	RIG INFO	
Bit	1.00	8.750		Arapien	1,903	1,900		100% Shale w/ lm input	Rig No	
Motor (1.8 Deg)	26.46	6.500							Cell No (918) 645-6671	
Bit Pin XO	1.35	6.250							Last BOP Test	7/6
Monel	31.52	6.250	3.000	BOTTOMS UP TIME	BG GAS	GAS DATA CONN GAS		TRIP GAS	Next BOP Test	7/6
Pulsar	5.86	6.312	3.000						Last Safety Meeting	7/4
Float sub XO	1.91	6.375	2.500	GAS UNITS	FROM	SHOWS TO		ROP (FT/HR)	Last BOP Drill	
SS	8.00	6.750	2.250						Last Operate Pipe Ram	7/6
XO	1.29	6.250	2.250						Last Operate Blind Ram	7/6
20 6" DC	589.67	6.000	2.250						Last Operate Annular	7/6
XO	1.34	6.560	2.250							
Hydraulic Jar	32.18	6.250	2.250							
XO	2.73	6.437	2.250							
3 6" DC	91.54	6.000	2.250							
XO	1.80	6.000	2.250							
DP	1,214.00	4.500	3.826							
Total BHA:	2,010.66									
STRING WT.	BHA WT.	PU WT.	SO WT.	ROT. TORQUE	GRD. ELEVATION	GL TO KB	KB ELEVATION	INTERMEDIATE CSG	LAST CASING	NEXT CASING
75	55	75	48		5,835	12	5,847	NA	1542	6600

SURVEYS

MD	INCL	AZIMUTH	TVD	SECTION	N+ / S-	E+ / W-	DLS	TOOL	MD	INCL	AZIMUTH	TVD	SECTION	N+ / S-	E+ / W-	DLS	TOOL
1,781	5.60	268.90	1779	8.44	-38.93	-63.75	1.47	MWD	1,903	6.60	273.10	1900	1.67	-37.53	-76.81	1.49	MWD
1,841	6.30	280.90	1839	5.33	-38.36	-69.91	5.33	MWD	1,936	7.10	271.00	1933	-0.11	-37.39	-80.74	1.69	MWD

DAILY ACTIVITY

FROM	TO	HRS	LAST 24 HOURS
6:00	7:00	1.00	Drilling from 1652'-1695'
7:00	8:30	1.50	Started seeping mud. Pull up in surface pipe. Condition mud with LCM.
8:30	9:00	0.50	Trip back to bottom.
9:00	14:00	5.00	Drilling from 1695'-1826'
14:00	20:00	6.00	Seeped 200 bbls. Pull up into surface pipe. Mix 275 bbs in premix pit.
20:00	23:30	3.50	Drilling from 1826'-1948'
23:30	1:30	1.50	TOH. MWD is plugged with LCM
1:30	2:30	1.00	Change MWD with a 1.8 dep bent housing.
2:30	4:30	2.00	Trip to bottom.
4:30	5:00	0.50	Drilling from 1948'-2011'
5:00	6:00	1.00	Plugged MWD. Trying to unplug with water sweep.
6:00			
0:00			
0:00			Fuel Usage 462 gals
0:00			Mud usage: 98 sxs anco gel, 3 sxs anco drill, 2 sxs caustic soda, 9 sxs anco pac, 56 sxs mica, 56 sxs nutshell, 394 sxs salt, 37 sxs salt gel, 27 sxs starch, 9 sxs flowzan, 4 gals defoamer
Daily Total	23.50		

COST DATA

Engineering & Supervision										XACT Engineering, Inc.										118) 599-8400											
Operator: Wolverine G&O Co of Utah, LLC										DAILY DRILLING REPORT										AP# 43-041-30031											
DATE 07/09/04			WELL Wolverine Federal 17-2			CONTRACTOR CDDT Rig#10			COUNTY, STATE Sevier, UT			SPUD DATE 07/02/04			AFE			SUPERVISOR David Spitz													
DAYS F/SPUD 7			PRESENT OPERATIONS TIH			TOTAL DEPTH 2,024			PROGRESS 13			DRILLING TIME 1.00			ROP 13.0			FORMATION Arapien			AUTH. DEPTH 6,600										
MUD DATA																															
WT		VIS.		WL		CK		PH		SAND		SOLIDS %		PV		YP		GELS		DEPT		DATE/TIME		CHLORIDES		CALCIUM		MBT		SALT PPM	
8.7		37		8.0		1/32		10.0		0.00		0.5		8		16		4/7		201		7/8 6:00 PM		40,000		110		66,000			
BIT DATA																															
BIT NO.		SIZE		MFG.		TYPE		IADC CODE		SERIAL NO.		JETS (1/32nd") or TFA		IN		OUT		FOOTAGE		HOUR		ROP		MTR		RPM		WOB		DULL CONDITION	
1		12-1/4"		SDBS		XL-12		437		742785		0.96		80		1542		1462		29.0		50.4		Y		40/164		42		1.2 1 1/16"	
2		8-3/4"		SDBS		X530S		537		10383994		15 15 15		1542				482		15.5		31.1		Y		35/120		10/20			
																						#DIV/O!									
																						#DIV/O!									
HYDRAULICS																				SLOW PUMP											
PUMP NO.		MANUFACTURER		LINER		STROKE LENGTH		GAL / STK		SPM		GPM		AV DP		AV DC		PUMP PRESS.		MTR DIFF PRESS.		HHP / IN ²		ECD		80 spm		90 spm		100 spm	
1		Wilson 600		5"		14		4.03		72		290														1					
2		Wilson 600		5"		14		4.03		74		0														2					
Both								8.06		146		290		186		253		1430		200		168		9.8							
DRILL STRING										GEOLOGIC										GENERAL INFO											
BOTTOMHOLE ASSEMBLY			LENGTH			O.D.			I.D.			FORMATION			MD			TVD			LITHOLOGY			RIG INFO							
Bit			1.00			8.750						Arapien			1,903			1,900			100% Shale w/ fm input			Rig No							
Motor (1.8 Deg)			26.46			6.500																		Cell Nr (918) 645-6671							
Dbl Pin XO			1.35			6.250																		Last BOP Test 7/6							
Monel			31.52			6.250			3.000			BOTTOMS UP TIME			BG GAS			CORNGAS			TRIP GAS			Next BOP Test 7/6							
Pulsar			5.86			6.312			3.000															Last Safety Meeting 7/4							
Float sub XO			1.91			6.375			2.500			GAS UNITS			FROM			SHOWS TO			ROP (F/HR)			Last BOP Drill 7/8							
SS			8.00			6.750			2.250															Last Operate Pipe Ra 7/6							
XO			1.29			6.250			2.250															Last Operate Blind Ra 7/6							
20 6" DC			589.67			6.000			2.250															Last Operate Annular 7/6							
XO			1.34			6.580			2.250																						
Hydraulic Jar			32.18			6.250			2.250																						
XO			2.73			6.437			2.250																						
3 6" DC			91.54			6.000			2.250																						
XO			1.80			6.000			2.250																						
DP			1,214.00			4.500			3.826																						
Total BHA:			2,010.65																												
STRING WT.		BHA WT.		PU WT.		SO WT.		ROT. TORQUE		GRD. ELEVATION		GL TO KB		KB ELEVATION		INTERMEDIATE CSG		LAST CASING		NEXT CASING											
75		55		75		48				5,835		12																			

Engineering & Supervision										EXACT Engineering, Inc.										(918) 599-9400																	
Operator: Wolverine G&O Co of Utah, LLC										DAILY DRILLING REPORT										API# 43-041-30031																	
DATE		WELL				CONTRACTOR				COUNTY, STATE				SPUD DATE		AFE		SUPERVISOR																			
07/10/04		Wolverine Federal 17-2				CDDT Rig#10				Sevier, UT				07/02/04				David Spitz																			
DAYS F/SPUD		PRESENT OPERATIONS				TOTAL DEPTH		PROGRESS		DRILLING TIME		ROP		FORMATION		AUTH. DEPTH																					
8		Drilling				2,581		570		19.00		30.0		Arapien		6,600																					
MUD DATA																																					
WT		VIS		WL		CK		PH		SAND		SOLIDS %		PV		YP		GELS		DEPTH		DATE/TIME		CHLORIDES		CALCIUM		MBT		SALT PPM							
8.6		33		12.0		1/32		11.0		tr		0.5		6		9		4/5		2340		7/9 6:00 PM		23,000		448				37,950							
BIT DATA																																					
BIT NO.		SIZE		MFG.		TYPE		IADC CODE		SERIAL NO.		JETS (1/32nd) or TFA		IN		OUT		FOOTAGE		HOUS		ROP		MTR		RPM		WOB		DULL CONDITION							
1		12-1/4"		SDBS		XL-12		437		742785		0.96		80		1542		1462		29.00		50.4		Y		40/164		42		1.2 1 1/16"							
2		8-3/4"		SDBS		X530S		537		10383994		15 15 15		1542				1039		34.50		30.1		Y		35/120		20/25									
																						#DIV/0!															
																						#DIV/0!															
HYDRAULICS																		SLOW PUMP																			
PUMP NO.		MANUFACTURER		LINER		STROKE LENGTH		GAL / STK		SPM		GPM		AV DP		AV DC		PUMP PRESS.		MTR DIFF PRESS.		HHP / IN ²		ECD		60 spm		80 spm		100 spm							
1		Wilson 600		5"		14		3.8		64		243														1											
2		Wilson 600		5"		14		3.8		61		232														2											
Both								7.6		125		475		186		253		1140		200		168		8.7													
DRILL STRING																		GEOLOGIC										GENERAL INFO									
BOTTOMHOLE ASSEMBLY				LENGTH				O.D.				I.D.				FORMATION				MD				TVD				LITHOLOGY				RIG INFO					
Bit				1.00				8.750								Arapien				2,300				2,295				SS 100%				Rig No					
Motor (1.8 Deg)				26.46				6.500								Arapien				2,330				2,325				SS 30% SLST 20% SH 50%				Cell No (918) 645-6671					
Dbl Pin XO				1.35				6.250								Arapien				2,360				2,355				SH 70% SLST 30%				Last BOP Test 7/6					
Monel				31.52				6.250				3.000				BOTTOMS UP TIME				BG GAS				CONV GAS				TRIP GAS				Next BOP Test					
Pulsar				5.86				6.312				3.000																				Last Safety Meeting 7/9					
Float sub XO				1.91				6.375				2.500				GAS UNITS				FROM				SHOWS TO				ROP (FTRR)				Last BOP Drill					
SS				8.00				6.750				2.250																				Last Operate Pipe Ram 7/6					
XO				1.29				6.250				2.250																				Last Operate Blind Ram 7/6					
20 6" DC				589.67				6.000				2.250																				Last Operate Annular 7/6					
XO				1.34				6.560				2.250																									
Hydraulic Jar				32.18				6.250				2.250																									
XO				2.73				6.437				2.250																									
3 6" DC				91.54				6.000				2.250																									
XO				1.80				6.000				2.250																									
DP				1,785.00				4.500				3.826																									
Total BHA:				2,581.65																																	
STRING WT.		BHA WT.		PU WT.		SO WT.		ROT. TORQUE		GRD. ELEVATION		GL TO KB		KB ELEVATION		INTERMEDIATE CSG		LAST CASING		NEXT CASING																	
82		55		92						5,835		12		5,847		NA		1542		6600																	
SURVEYS																																					
MD		INCL		AZIMUTH		TVD		SECTION		N+ / S-		E+ / W-		DLS		TOOL		MD		INCL		AZIMUTH		TVD		SECTION		N+ / S-		E+ / W-		DLS		TOOL			
2,095		9.80		234.60		2090		-5.30		-42.79		-104.67		6.74		MWD		2,380		6.20		184.30		2372		17.11		-78.61		-128.60		6.24		MWD			
2,222		9.60		218.90		2215		3.54		-58.63		-117.79		1.62		MWD		2,474		3.40		141.00		2465		24.19		-85.69		-127.01		3.49		MWD			
DAILY ACTIVITY																																					
FROM		TO		HRS		LAST 24 HOURS:																															
6:00		8:00		2.00		Fuel Premix tank. Top off pits to lower LCM content in mud system.																															
8:00		22:00		14.00		Drilling from 2024'-2377' (Slide 249', Rotate 104')																															
22:00		22:30		0.50		Transfer mud with LCM																															
22:30		6:00		5.00		Drilling from 2377'-2581' (Mud Losses are @ 35 bbls/hr). Plans are to keep increasing LCM. EMT tool is on location.																															
6:00		20:00		6.00																																	
20:00		23:30		3.50																																	
23:30		1:30		1.50																																	
1:30		2:30		1.00																																	
2:30		4:30		2.00																																	
4:30		5:00		0.50																																	
5:00		6:00		1.00																																	
6:00																																					
0:00																																					
0:00						Fuel Usage 880 gals																															
0:00						Mud usage: 66 sxs anco gel, 1 sxs anco drill, 10 sxs caustic soda, 3 sxs anco pac																															
						14 sxs starch, 4 sxs flowzan, 1 gals defoamer																															
Daily Total				37.00																																	
COST DATA																																					

(918) 553-9400

DAILY DRILLING REPORT

APH# 43-041-30031

DAILY ACTIVITY			
FROM	TO	HRS	LAST 24 HOURS:
6:00	11:00	5.00	Drilling from 2581'-2678'
11:00	12:30	1.50	Service Rig. Go through pumps.
12:30	23:00	10.50	Drilling from 2678'-2868'
23:00	23:30	0.50	Service Rig.
23:30	6:00	6.50	Drilling from 2868'-2995'
6:00	0:00	0.00	
			Fuel Usage 623 gals
			Mud usage: 222 sxs anco gel, 5 sxs anco drill, 13 sxs caustic soda, 7 sxs anco pac
			30 sxs starch, 11 sxs flowzan, 65 sxs mica, 40 sxs cedar fiber.
Daily Total		24.00	

COST DATA

(918) 599-9400

Operator: Wolverine G&O Co of Utah, LLC

DAILY DRILLING REPORT

APH# 43-041-30031

DATE	WELL	CONTRACTOR	COUNTY, STATE	SPUD DATE	AFE	SUPERVISOR	
07/12/04	Wolverine Federal 17-2	CCDT Rig#10	Sevier, UT	07/02/04		David Spitz	
DAYS F/ SPUD	PRESENT OPERATIONS	TOTAL DEPTH	PROGRESS	DRILLING TIME	ROP	FORMATION	AUTH. DEPTH
12	Drilling	3,374	379	20.50	18.5	Arapieen	6,600

MOD DATA

WT	VIS.	WL	CK	PH	SAND	SOLIDS %	PV	YP	GELS	DEPTH	DATE/TIME	CHLORIDES	CALCIUM	MBT	SALT PPM
8.8	39	16.0	2/32	9.0	0.50	1.7	10	13	8/12	3229	7/11 6:00 PM	33,000	1000		54,450

BIT DATA

BIT NO.	SIZE	MFG.	TYPE	IADC CODE	SERIAL NO.	JETS (1/32nd)		IN	OUT	FOOTAGE	HOURS	ROP	MTR	RPM	WOB	DULL CONDITION		
						or TFA										T	S	G
1	12-1/4"	SDBS	XL-12	437	742785		0.96	80	1542	1462	29.00	50.4	Y	40/164	42	1.2	1	1/16"
2	8-3/4"	SDBS	X530S	537	10383994	15	15	15	1542	3374	1832	78.00	23.5	Y	35/135	15/40		
												#DIV/0!						
												#DIV/0!						

HYDRAULICS

PUMP NO.	MANUFACTURER	LINER	STROKE LENGTH	GAL / STK	SPM	GPM	AV DP	AV DC	PUMP PRESS.	MTR DIFF PRESS.	HHP / IN ²	ECD		30 spm	49spm	100 spm
1	Wilson 600	5"	14	3.8	62	236							1	150		
2	Wilson 600	5"	14	3.8	61	232							2		140	
Both				7.6	123	467	186	253	1140	200	168	8.7				

SLOW PUMP

[illegible]

DRILL STRONG

DRILL STRING				
BOTTOM-HOLE ASSEMBLY		LENGTH	O.D.	I.D.
Bit		1.00	8.750	
Motor (1.8 Deg)		26.46	6.500	
Dbl Pin XO		1.35	6.250	
Monel		31.52	6.250	3.000
Pulsar		5.86	6.312	3.000
Float sub XO		1.91	6.375	2.500
SS		8.00	6.750	2.250
XO		1.29	6.250	2.250
20 6" DC		589.67	6.000	2.250
XO		1.34	6.560	2.250
Hydraulic Jar		32.18	6.250	2.250
XO		2.73	6.437	2.250
3 6" DC		91.54	6.000	2.250
XO		1.80	6.000	2.250
DP		2,575.00	4.500	3.826
Total BHA:		3,371.65		
STRING WT.	BHA WT.	PU WT.	SO WT.	ROT. TORQUE
105	55	120	65	

GEOLOGIC

[illegible]

GENERAL INFO

LITHOLOGY		RIG INFO	
	SS 80% SH20%	Rig No	
	SS 80% SH20%	Cell Nc	(918) 645-6671
		Last BOP Test	7/6
	TRIP GAS	Next BOP Test	7/13
		Last Safety Meeting	7/11
		Last BOP Drill	7/10
	ROP (FTR/R)	Last Operate Pipe Ram	7/6
		Last Operate Blind Ram	7/6
		Last Operate Annular	7/6
INTERMEDIATE CSG		LAST CASING	NEXT CASING
NA		1542	6600

SURVEYS

MD	INCL	AZMUTH	TVD	SECTION	N+ / S-	E+ / W-	DLS	TOOL	MD	INCL	AZMUTH	TVD	SECTION	N+ / S-	E+ / W-	DLS	TOOL	
3,044	4.20	80.60	3033	61.66	#####	-92.91	3.08	MWD	3,139	2.90	131.80		3128	64.42	#####	-87.85	2.56	MWD
3,108	2.60	116.40	3097	39.73	#####	-89.06	6.64	MWD	3,202	3.90	138.20		3191	67.94	#####	-85.23	1.70	MWD

PAVAGIMITY

FROM	TO	HRS	LAST 24 HOURS:
6:00	12:00	6.00	Drilling 2995'-3089' (12 bbis mud loss)
12:00	12:30	0.50	Service Rig
12:30	18:30	6.00	Drilling 3089'-3215' (72 bbis mud loss)
18:30	21:30	3.00	Drilling 3215'-3244', with one pump. Repair time on other. (103 bbis mud loss).
21:30	22:30	1.00	Rig Repair. Work on both pumps
22:30	4:00	5.50	Drilling 3244'-3374'
4:00	6:00	2.00	TOH to change bit, motor and add EMT tool instead of MWD.
			Fuel Usage 672 gals
			Mud usage: 88 sxs anco gel, 3 sxs caustic soda, 1 sx Al sterate, 3 sxs. anco pac 12 sxs starch, 4 sxs flowzan, 17 sxs mica, 31 sxs cedar fiber, 5 gal defoamer.
Daily Total		24.00	

COST DATA

API# 43-041-30031

COST DATA	
1	2
3	4
5	6
7	8
9	10
11	12
13	14
15	16
17	18
19	20
21	22
23	24
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37	38
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47	48
49	50
51	52
53	54
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57	58
59	60
61	62
63	64
65	66
67	68
69	70
71	72
73	74
75	76
77	78
79	80
81	82
83	84
85	86
87	88
89	90
91	92
93	94
95	96
97	98
99	100

Engineering & Supervision				EXACT Engineering, Inc.				(918) 599-9400			
Operator: Wolverine G&O Co of Utah, LLC				DAILY DRILLING REPORT				APM# 43-041-30031			
DATE	WELL	CONTRACTOR	COUNTY, STATE	SPUD DATE	AFE	SUPERVISOR					
07/14/04	Wolverine Federal 17-2	CDDT Rigt#10	Sevier, UT	07/02/04		David Spitz					
DAYS F/ SPUD	PRESENT OPERATIONS	TOTAL DEPTH	PROGRESS	DRILLING TIME	ROP	FORMATION	AUTH. DEPTH				
12	Drilling	4,100	387	13.50	28.7	Arapien	6,600				
MUD DATA											
WT	VIS.	WL	CK	PH	SAND	SOLIDS %	PV				
9.1	41	9.0	1/32	9.5	0.50	1.5	22				
BIT DATA											
BIT NO.	SIZE	MFG.	TYPE	IADC CODE	SERIAL NO.	JETS (1/32nd" or TFA)	IN				
1	12-1/4"	SDBS	XL-12	437	742785	0.96	80				
2	8-3/4"	SDBS	X530S	537	10383994	15	15				
3	8-3/4"	SDBS	X530S	537	10408876	20	20				
HYDRAULICS											
PUMP NO.	MANUFACTURER	LINER	STROKE LENGTH	GAL / STK	SPM	GPM	AV DP				
1	Wilson 600	5"	14	3.8	62	238					
2	Wilson 600	5"	14	3.8	61	232					
Both				7.6	123	467	186				
SLOW PUMP											
				30 spm	49spm	100 spm					
DRILL STRING											
BOTTOMHOLE ASSEMBLY	LENGTH	O.D.	I.D.	FORMATION	MD	TVD					
Bit	1.00	8.750		Arapien	3,241	3,231					
Motor (1.5 Deg)	26.48	6.500									
Monel & Pony Collar	39.11	6.250	3.250								
XO	1.25	6.125	3.250								
PWD Sub	2.81	6.500	3.500								
Gap Sub	4.55	6.500	3.500								
Float sub/SS	8.62	6.375	2.500								
XO	1.29	6.250	2.250								
20 6" DC	589.67	6.000	2.250								
XO	1.34	6.560	2.250								
Hydraulic Jar	32.18	6.250	2.250								
XO	2.73	6.437	2.250								
3 6" DC	91.54	6.000	2.250								
XO	1.80	6.000	2.250								
DP	3,300.00	4.500	3.826								
Total BHA:	4,101.56										
STRING WT.	BHA WT.	PO WT.	SO WT.	ROT. TORQUE	GRD. ELEVATION	GL TO KB	KB ELEVATION				
105	55	130	85		5,835	12	5,847				
GEOLOGIC											
				FORMATION	MD	TVD					
				Arapien	3,241	3,231					
				LITHOLOGY	SS 80% SH20%						
				RIG INFO							
				Rig No:							
				Cell No. (918) 645-6671							
				Last BOP Test 7/13							
				Next BOP Test 7/20							
				Last Safety Meeting 7/13							
				Last BOP Drill 7/13							
				Last Operate Pipe Ram 7/13							
				Last Operate Blind Ram 7/13							
				Last Operate Annular 7/6							
GENERAL INFO											
				INTERMEDIATE CSG							
				LAST CASING							
				NEXT CASING							
				NA							
				1542							
				6600							
SURVEYS											
MD	INCL	AZIMUTH	TVD	SECTION	N+ / S-	E+ / W-	DLS				
3,750	3.00	109.70	3738	89.80	-141.11	-90.60	1.49				
3,812	3.90	100.00	3800	92.17	-142.09	-87.09	2.41				
DAILY ACTIVITY											
FROM	TO	HRS	LAST 24 HOURS								
6:00	7:00	1.00	Drilling 3713'-3752' (rotate 39')								
7:00	7:30	0.50	Build mud vol.								
7:30	15:00	7.50	Drilling 3752'-3966' (Slide 62'/ Rotate 152') mud losses upto 40 bbs/hr								
15:00	16:00	1.00	Attempt to regain signal on EMT tool. Failed								
16:00	19:00	3.00	TOH								
19:00	21:00	2.00	Increase amps on EMT. PU pony monel.								
21:00	1:00	4.00	TIH								
1:00	6:00	5.00	Drilling 3966'-4100' (Slide 48'/Rotate 86') Mud losses 10 to 20 bbls/hr								
FUEL & MUD USAGE											
Fuel Usage 542 gals											
Mud usage: 109 sxs anco gel, 4 sxs anco drill, 8 sxs caustic soda, 8 sxs anco pac, 20 sxs Salt Gel											
15 sxs starch, 10 sxs flowzan, 48 sxs mica, 100 sxs cedar fiber, 103 sxs nutshell, 1 gal defoamer, 1 drum CI300.											
Daily Total		24.00									
COST DATA											

API# 43-041-30031

FROM	TO	HRS	LAST 24 HOURS:
6:00	10:00	4.00	Drilling 4100'-4193' (slid 20'/rotate73')
10:00	11:30	1.50	Service Rig. Work on pumps. Clean tank.
11:30	18:00	6.50	Drilling 4193'-4316' (slid 60'/rotate63") mud losses 0' bbls
18:00	19:00	1.00	Service Rig. Repair air leak. Work on pumps
19:00	3:30	8.50	Drilling 4316'-4749' rotate all, mud losses 0' bbls
3:30	4:00	0.50	Service Rig
4:00	6:00	2.00	Drilling 4749'-4867' rotate all.
			Fuel Usage 798 gals
			Mud usage: 50 sxsanco gel, 6 sxs caustic soda, 4 sxs anco pac, 23 sxs Salt Gel
			13 sxs starch, 1 sxs flowzan, 40 sxs mica, 31 sxs cedar fiber, 30 sxs nutshell.
Daily Total		24.00	

APH# 43-041-30031

[illegible]

Operator: Wolverine G&O Co of Utah, LLC

DAILY DRILLING REPORT

APH# 43-041-30031

DATE	WELL	CONTRACTOR		COUNTY, STATE		SPUD DATE	AFE	SUPERVISOR
07/17/04	Wolverine Federal 17-2	CDDT Rig#10		Sevier, UT		07/02/04		David Spitz
DAYS F/ SPUD	PRESENT OPERATIONS		TOTAL DEPTH	PROGRESS	DRILLING TIME	ROP	FORMATION	AUTH. DEPTH
15	Drilling		5,255	305	17.50	17.4	Arapien	6,600

INSD DATA

WT	VIS.	WL	CK	PH	SAND	SOLIDS %	PV	YP	GELS	DEP" H	DATE/TIME	CHLORIDES	CALCIUM	MBT	SALT PPM
9.6	34	13.6	1/32	8.8	0.00	2.0	7	9	5/7	5148	7/16 7:00 PM	121,000	1380		199,650

BIT DATA

BIT NO.	SIZE	MFG.	TYPE	IADC CODE	SERIAL NO.	JETS (1/32nd) or TFA			IN	OUT	FOOTAGE	HOURS	ROP	MTR	RPM RT-MTR	WOB	DULL CONDITION		
																	T	B	G
1	12-1/4"	SDBS	XL-12	437	742785		0.96		80	1542	1462	29.00	50.4	Y	40/164	42	1.2	1	1/16"
2	8-3/4"	SDBS	X530S	537	10363994	15	15	15	1542	3374	1832	78.00	23.5	Y	35/135	15/40	4.5	1	1
3	8-3/4"	SDBS	X530S	537	10408876	20	20	20	3374		1872	71.00	26.4	Y	35/135	15/40			
													#DIV/0!						

HYDRAULICS

PUMP NO.	MANUFACTURER	LINER	STROKE LENGTH	GAL / STK	SPM	GPM	AV OP	AV DC	PUMP PRESS	MTR OFF PRESS.	HHP / IN ²	ECO	30 spm	49spm	100 spm
1	Wilson 600	5"	14	3.8	73	277							1	150	
2	Wilson 600	5"	14	3.8	75	285							2		160
Both				7.6	148	562	186	253	1490	200	168	9.6			

SLOW PUMP

PUMP NO.	MANUFACTURER	LINER	STROKE LENGTH	GAL / STK	SPM	GPM	AV DP	AV DC	PUMP PRESS.	MTR OFF PRESS.	HHP / IN ²	ECD		30 spm	49spm	100 spm
1	Wilson 600	5"	14	3.8	73	277							1	150		
2	Wilson 600	5"	14	3.8	75	285							2		160	
Both				7.6	148	562	186	253	1490	200	168	9.6				

DRILL STRING

BOTTOMHOLE ASSEMBLY		LENGTH	O.D.	I.D.	FORMATION	MD	TVD	LITHOLOGY	RIG INFO	
Bit		1.00	8.750		Arapien	4,700	4,686	Mostly Salt	Rig No:	
Motor (1.5 Deg)		26.48	6.500						Cell No. (918) 645-6671	
Monel & Pony Collar		39.11	6.250	3.250					Last BOP Test	7/13
XO		1.25	6.125	3.250	BOTTOMS UP TIME	BG GAS	GAS DATA CORR GAS	TRIP GAS	Next BOP Test	7/20
PWD Sub		2.81	6.500	3.500					Last Safety Meeting	7/15
Gap Sub		4.55	6.500	3.500	GAS UNITS	FROM	SHOWS TO	ROP (FTH/HR)	Last BOP Drill	7/13
Float sub/SS		8.62	6.375	2.500					Last Operate Pipe Ram	7/13
XO		1.29	6.250	2.250					Last Operate Blind Ram	7/13
20 6" DC		589.67	6.000	2.250					Last Operate Annular	7/6
XO		1.34	6.560	2.250						
Hydraulic Jar		32.18	6.250	2.250						
XO		2.73	6.437	2.250						
3 6" DC		91.54	6.000	2.250						
XO		1.80	6.000	2.250						
DP		4,455.00	4.500	3.826						
Total BHA:		5,256.56								
STRING WT.	BHA WT.	PU WT.	SO WT.	ROT. TORQUE	GRD. ELEVATION	GL TO KB	KB ELEVATION	INTERMEDIATE CSG	LAST CASING	NEXT CASING
129	55	200	70		5,835	12	5,847	NA	1542	6600

GEOLOGIC

GENERAL INFO

SURVEYS

MD	INCL	AZMUTH	TVD	SECTION	N+/-	E+/-	DLS	TOOL	MD	INCL	AZMUTH	TVD	SECTION	N+/-	E+/-	DLS	TOOL
4,951	10.50	335.20	4933	32.58	-75.52	-85.21	1.01	WST	5,110	9.90	345.60	5090	5.43	-50.62	-96.05	3.18	WST
5,046	9.40	334.90	5026	15.95	-60.57	-92.50	2.10	WST	5,205	5.70	338.50	5184	-7.69	-37.69	-99.39	6.77	WST

DAILY ACTIVITY

FROM	TO	HRS	LAST 24 HOURS:
6:00	7:30	1.50	Drilling (4950'-5005') Rotate 20' Slide 35'
7:30	10:00	2.50	Repair wireline steering equipment.
10:00	12:30	2.50	Drilling (5005'-5039') Rotate 15', Slide 24'
12:30	14:30	2.00	Work on rig pumps.
14:30	20:00	5.50	Drilling (5039'-5146') Rotate 27', Slide 80'.
20:00	21:30	1.50	Work on rig pumps.
21:30	22:00	0.50	Repair wireline steering equipment.
22:00	6:00	8.00	Drilling (5146'-5255') Rotate 12', Slide 97'. Mud losses 20 bph
			Fuel usage 420 gal
			Mud usage: 7 sxs anco gel, 2 sxs caustic soda, 3 sxs anco pac, 1 sxs Desco, 1 anco drill, 1 xcide, 1 defoamer, 1 CI 300A
			19 sxs starch, 4 sxs flowzan, 25 sxs mica, 20 sxs cedar fiber, 5 sxs nutshell, 20 sxs fiber plug.
Daily Total		24.00	

Operator: Wolverine G&O Co of Utah, LLC

DAILY DRILLING REPORT

AP# 43-041-30031

DATE 07/18/04	WELL Wolverine Federal 17-2	CONTRACTOR CDDT Rig #10	COUNTY, STATE Sevier, UT	SPUD DATE 07/02/04	AFE	SUPERVISOR David Spitz
DAYS F/ SPUD 16	PRESENT OPERATIONS TOH	TOTAL DEPTH 5,435	PROGRESS 180	DRILLING TIME 12.00	ROP 15.0	FORMATION Arapien
						AUTH. DEPTH 6,600

INDO DAYA

WT	VIS.	WL	CK	PH	SAND	SOLIDS %	PV	YP	GELS	DEPTH	DATE/TIME	CHLORIDES	CALCIUM	MBT	SALT PPM
9.5	35	8.0	1/32	11.0	tr	2.0	10	7	4/5	5400	7/17 7:00 PM	101,000	320		166,650

BIT DATA

BIT NO.	SIZE	MFG.	TYPE	IADC CODE	SERIAL NO.	JETS (1/32nd) or TFA			IN	OUT	FOOTAGE	HOURS	ROP	MTR	RPM RT-MTR	WOB	DULL CONDITION		
																	T	B	G
1	12-1/4"	SDBS	XL-12	437	742785		0.96		80	1542	1462	29.0	50.4	Y	40/164	42	1.2	1	1/16"
2	8-3/4"	SDBS	X530S	537	10383994	15	15	15	1542	3374	1832	78.0	23.5	Y	35/135	15/40	4.5		I
3	8-3/4"	SDBS	X530S	537	10408876	20	20	20	3374	5435	2061	83.0	24.8	Y	35/135	15/40			
													#DIV/0!						

HYDRAULICS

[illegible]

SLOW PUMP

[illegible]

DRILL STRING

BHA DATA				WELL DATA			LITHOLOGY	RIG INFO	
BOTTOMHOLE ASSEMBLY	LENGTH	O.D.	I.D.	FORMATION	MD	TVD			
				Arapien	5,205	5,184	SH 10-40%, LS 10-90%	Rig No:	
							ANHY 10-40%	Cell No.	(918) 645-667
								Last BOP Test	7/13
				BOTTOMS UP TIME	BG GAS	GAS DATA CONN GAS	TRIP GAS	Next BOP Test	7/20
								Last Safety Meeting	7/15
								Last BOP Drill	7/13
				GAS UNITS	FROM	SHOWS TO	ROP (F/HR)	Last Operate Pipe Ram	7/13
								Last Operate Blind Ram	7/13
								Last Operate Annular	7/6

GEOLOGIC

GENERAL INFO

SURVEYS

MD	INCL	AZMUTH	TVD	SECTION	N+ / S-	E+ / W-	DLS	TOOL	MD	INCL	AZMUTH	TVD	SECTION	N+ / S-	E+ / W-	DLS	TOOL
5.268	3.70	355.90	5246	-12.91	-32.59	-100.77	4.90	WST	5.363	3.60	190.60	5341	-12.59	-33.03	-100.99	5.55	WST
5.330	1.80	182.80	5308	-13.90	-31.50	-100.77	9.31	WST	5.395	4.40	195.80	5373	-10.84	-35.20	-101.50	2.72	WST

DAILY ACTIVITY

FROM	TO	HRS	LAST 24 HOURS
6:00	9:00	3.00	Drilling (5255'-5308')
9:00	12:00	3.00	Repair wireline steering equipment.
12:00	12:30	0.50	Drilling (5308'-5314')
12:30	15:00	2.50	Repair wireline steering equipment.
15:00	23:30	8.50	Drilling (5314'-5435'). TD intermediate hole. Slide last 20'. Hole is still wanting to build.
23:30	0:30	1.00	Circ hole
0:30	6:00	5.50	TOH.
			Fuel usage 630 gal
			Mud usage: 99 sxs anco gel, 23 sxs caustic soda, 7 sxs anco pac, 4 anco drill, 1 defoamer, 166 sxs salt gel, Torque ease 2 bbl
			96 sxs starch, 16 sxs flowzan, 97 sxs mica, 68 sxs cedar fiber, 73 sxs nutshell, 40 sxs fiber plug.
Daily Total	24.00		

(918) 599-9400

Operator: Wolverine G&O Co of Utah, LLC

DAILY DRILLING REPORT

APH# 43-041-30031

DATE 07/19/04	WELL Wolverine Federal 17-2	CONTRACTOR CDDT Rig#10	COUNTY, STATE Sevier, UT	SPUD DATE 07/02/04	AFE	SUPERVISOR David Spitz
DAYS F/ SPUD 17	PRESENT OPERATIONS Logging	TOTAL DEPTH 5,435	PROGRESS 0	DRILLING TIME 0.00	ROP #DN/O!	FORMATION Arapien
						AUTH. DEPTH 6,600

WUB DATA

WT	VIS.	WL	CK	PH	SAND	SOLIDS %	PV	YP	GELS	DEPTH	DATE/TIME	CHLORIDES	CALCIUM	MBST	SALT PPM
9.5	35	8.0	1/32	11.0	tr	2.0	10	7	4/5	5410	7/17 7:00 PM	101,000	320		166,650

BIT DATA

BIT NO.	SIZE	MFG.	TYPE	IADC CODE	SERIAL NO.	JETS (1/32nd" or TFA)			IN	OUT	FOOTAGE	HOURS	ROP	MTR	RPM RT-MTR	WOB	DUAL CONDITION		
																	T	B	G
1	12-1/4"	SDBS	XL-12	437	742785		0.96		80	1542	1462	29.30	50.4	Y	40/164	42	1.2	1	1/16"
2	8-3/4"	SDBS	X530S	537	10383994	15	15	15	1542	3374	1832	78.30	23.5	Y	35/135	15/40	4.5	1	1
3	8-3/4"	SDBS	X530S	537	10408876	20	20	20	3374	5435	2061	83.30	24.8	Y	35/135	15/40			
													#DIV/0!						

HYDRAULICS

[illegible]

SLOW PUMP

[illegible]

DRILL STRING

[illegible]

GEOLOGIC

GENERAL INFO

SURVEYS

[illegible]

DAILY ACTIVITY

FROM	TO	HRS	LAST 24 HOURS:
6:00	9:00	3.00	TOH. LD Directional tools
9:00	11:00	2.00	TIH to 1475'
11:00	13:00	0.50	RD wireline steering tools.
13:00	17:30	4.50	Service rig. Clean pits
17:30	22:30	5.00	TIH. Ream 90' to bottom
23:30	23:00	1.00	Circulate and condition hole.
23:00	4:00	5.00	TOH for logs. (60,000 lbs of drag off bottom)
4:00	4:30	0.50	RU. open hole logging unit.
4:30	6:00	1.50	Logging.
			Fuel usage 336 gal
			Mud usage: 279 sxs anco gel, 4 sxs caustic soda, 1 anco drill, 1 defoamer, 40 sxs salt gel, 2 sxs Desco, Torque ease 2 bbls
			10 sxs starch, 107 sxs mica, 43 sxs cedar fiber, 27 sxs nutshell.
Daily Total		23.00	

COST DATA

[illegible]

[illegible]

(918) 599-9400

Operator: Wolverine G&O Co of Utah, LLC

DAILY DRILLING REPORT

APH# 43-041-30031

DATE	WELL	CONTRACTOR	COUNTY, STATE	SPUD DATE	AFE	SUPERVISOR	
07/22/04	Wolverine Federal 17-2	CDDT Rig#10	Sevier, UT	07/02/04		David Spitz	
DAYS F/ SPUD	PRESENT OPERATIONS	TOTAL DEPTH	PROGRESS	DRILLIN 3 TIME	ROP	FORMATION	AUTH. DEPTH
20	PU 3-1/2" drill string	5,435	0	0.00	#DIV/0!	Arapien	6,600

MOD DATA

[illegible]**BY DATA**

BIT NO.	SIZE	MFG.	TYPE	IADC CODE	SERIAL NO.	JETS (1/32nd) or TFA			IN	OUT	FOOTAGE	HOURS	ROP	MTR	RPM RT+MTR	WOB	DULL CONDITION		
																	T	B	G
1	12-1/4"	SDBS	XL-12	437	742785		0.96		80	1542	1462	29.00	50.4	Y	40/164	42	1.2	1	1/16"
2	8-3/4"	SDBS	X530S	537	10383994	15	15	15	1542	3374	1832	78.00	23.5	Y	35/135	15/40	4.5	1	I
3	8-3/4"	SDBS	X530S	537	10408876	20	20	20	3374	5435	2061	33.00	24.8	Y	35/135	15/40	6.7	1	I
4	6-1/4"	SDBS	SEB709	617Y	10553769	18	18	18	5435				#DIV/0!						

HYDRAULICS

[illegible]

SLOW PUMP

	30 spm	49spm	100 spm
1			
2			

DRUM STRING

[illegible]

surveys

[illegible]

DAILY ACTIVITY

FROM	TO	HRS	LAST 24 HOURS:
6:00	9:30	3.50	LD 4-1/2" kelly. PU 3-1/2" drill string.
9:30	12:30	3.00	Weld flange to rotating head that connects to flow line.
12:30	14:30	2.00	Slip 66' of drill line
14:30	3:30	13.00	PU 3-1/2" drill string
3:30	5:00	1.50	Dress 3-1/2" rotating head and install rubbers
5:00	6:00	1.00	DO cmt.
			Fuel: 168 gals
			Mud: no usage
Daily Total		24.00	

COST DATA

Operator: Wolverine G&O Co of Utah, LLC

DAILY DRILLING REPORT

APH# 43-041-30031

DATE	WELL	CONTRACTOR	COUNTY, STATE	SPUD DATE	AFE	SUPERVISOR	
07/23/04	Wolverine Federal 17-2	CDDT Rig#10	Sevier, UT	07/02/04		Steve Hash	
DAYS F/ SPUD	PRESENT OPERATIONS	TOTAL DEPTH	PROGRESS	DRILLIN 3 TIME	ROP	FORMATION	AUTH. DEPTH
21	Drilling @ 5605	5,605	170	11.25	15.1	Lime, Sh, Anhy	6,650

WGS DATA

WT	VIS	WL	CK	PH	SAND	SOLIDS %	PV	YP	GELS	DEPTH	DATE/TIME	CHLORIDES	CALCIUM	MET	SALT PPM
8.5	35	14.0	tr	10.5	0.00	0.5	5	5	2/3	5476	7/22/04 9:99pm	4,200	90		6,930

BIT DATA

BIT NO.	SIZE	MFG.	TYPE	IADC CODE	SERIAL NO.	JETS (1/32nd) or TFA			IN	OUT	FOOTAGE	HOURS	ROP	MTR	RPM RT+MTR	WOB	DULL CONDITION		
						T	B	G											
4	6-1/4"	SDBS	SEB709	617Y	10553769	18	18	18	5435	5454	19	0.50	38.0	N	80/90	20			
4R	6-1/4"	SDBS	SEB709	617Y	10553769	12	12	12	5454				#DIV/0!	Y	130/50	18			
													#DIV/0!	Y					
													#DIV/0!						

HYDRAULICS

[illegible]

SLOW PUMP

[illegible]

DRILL STRONG

BOTTOM-HOLE ASSEMBLY	LENGTH	O.D.	I.D.	FORMATION	ID	TVD	LITHOLOGY	RIG INFO
6-1/4 Bit	0.75	6.250					Anhy 10%	Rig No: (435) 979-4644
Motor (1.5 degr -	18.47	4.750					Shale 60%	Cell No. (918) 629-9801
dibl pin xo	1.88	4.125					Lime 30%	Last BOP Test 7/20
monel DC	28.82	4.750		BOTTOMS UP TIME	BG GAS	GAS DAY / CONN G S	TRIP GAS	Next BOP Test 7/27
MWD Pulsar	5.64	4.750		30				Last Safety Meeting 7/22
Float sub	3.02	4.750		GAS UNITS	FROM	SHOWS TO	ROP (FTHR)	Last BOP Drill 7/20
26 jts - spiral HWDP	803.10	4.750	2.125					Last Operate Pipe Ram 7/20
								Last Operate Blind Ram 7/22
								Last Operate Annular 7/20
Total BHA:	861.68							
STRING WT.	BHA WT.	PW WT.	SOWT.	ROT TORQUE	GRD. ELEVATION	GL TO KB	KB ELEVATION	INTERMEDIATE CSG
					5.835	12	5.841	7" @ 5435
								LAST CASING 7" @ 5435
								NEXT CASING 4-1/2" @ 6850

GEOLOGIC

BOTTOM-HOLE ASSEMBLY	LENGTH	O.D.	I.D.	FORMATION	ID	TVD	LITHOLOGY	RIG INFO
6-1/4 Bit	0.75	6.250					Anhy 10%	Rig No: (435) 979-4644
Motor (1.5 degr -	18.47	4.750					Shale 60%	Cell No. (918) 629-9801
dibl pin xo	1.88	4.125					Lime 30%	Last BOP Test 7/20
monel DC	28.82	4.750		BOTTOMS UP TIME	BG GAS	GAS DAY / CONN G S	TRIP GAS	Next BOP Test 7/27
MWD Pulsar	5.64	4.750		30				Last Safety Meeting 7/22
Float sub	3.02	4.750		GAS UNITS	FROM	SHOWS TO	ROP (FTHR)	Last BOP Drill 7/20
26 jts - spiral HWDP	803.10	4.750	2.125					Last Operate Pipe Ram 7/20
								Last Operate Blind Ram 7/22
								Last Operate Annular 7/20
Total BHA:	861.68							
STRING WT.	BHA WT.	PW WT.	SOWT.	ROT TORQUE	GRD. ELEVATION	GL TO KB	KB ELEVATION	INTERMEDIATE CSG
					5.835	12	5.841	7" @ 5435
								LAST CASING 7" @ 5435
								NEXT CASING 4-1/2" @ 6850

GENERAL INFO

BOTTOM-HOLE ASSEMBLY	LENGTH	O.D.	I.D.	FORMATION	ID	TVD	LITHOLOGY	RIG INFO
6-1/4 Bit	0.75	6.250					Anhy 10%	Rig No: (435) 979-4644
Motor (1.5 degr -	18.47	4.750					Shale 60%	Cell No. (918) 629-9801
dibl pin xo	1.88	4.125					Lime 30%	Last BOP Test 7/20
monel DC	28.82	4.750		BOTTOMS UP TIME	BG GAS	GAS DAY CONN'G IS	TRIP GAS	Next BOP Test 7/27
MWD Pulsar	5.64	4.750		30				Last Safety Meeting 7/22
Float sub	3.02	4.750		GAS UNITS	FROM	SHOWS TO	ROP (FTHR)	Last BOP Drill 7/20
26 jts - spiral HWDP	803.10	4.750	2.125					Last Operate Pipe Ram 7/20
								Last Operate Blind Ram 7/22
								Last Operate Annular 7/20
Total BHA:	861.68							
STRING WT.	BHA WT.	PW WT.	SOWT.	ROT. TORQUE	GRD. ELEVATION	GL TO KB	KB ELEVATION	INTERMEDIATE CSG
					5.835	12	5.841	7" @ 5435
								LAST CASING 7" @ 5435
								NEXT CASING 4-1/2" @ 6850

SURVEYS

MD	INCL	AZMUTH	TVD	SECTION	N+ / S-	E+ / W-	DLS	TOOL	MD	INCL	AZMUTH	TVD	SECTION	N+ / S-	E+ / W-	DLS	TOOL
5,435	4.00	200.00	5413	-8.69	-37.99	-102.39	1.28	mmwd	5,501	2.80	197.70	5479	-5.89	-41.76	-104.14	2.79	mmwd
5,470	3.60	203.60	5448	-7.10	-40.15	-103.25	1.33	mmwd	5,533	1.90	183.70	5511	-4.85	-43.03	-104.14	3.32	mmwd

DAILY ACTIVITY

FROM	TO	HRS	LAST 24 HOURS
6:00	7:45	1.75	Drill cmt & shoe
7:45	8:30	0.75	Drill new formation 5435' to 5454'
8:30	9:30	1.00	circ for samples, jet pits of cmt contaminated mud, begin mix new mud
9:30	1:00	3.50	TOOH w/ 3-1/2" string
1:00	1:30	0.50	service rig
1:30	3:00	1.50	Make up new BHA
3:00	7:00	4.00	TIH to 5454'
7:00	7:30	0.50	Displace hole with clean low solids polymer mud
7:30	6:00	10.50	Drilling 5454 to 5605; 151ft in 10.5 hrs = 14.4 fph; rotate 81' / slide 89'; last kelly 20' rotate / 12' slide
			Note: BLM Inspector Alan Walker made onsite inspection; OK, no concerns
			Fuel: 252 gals
			Mud usage: 4 anco drill, 3 caustic, 11 anco pac, 10 flozan, 3 liquid flozan,
Daily Total		24.00	

CONCLUSIONS

(918) 599-9400

Operator: Wolverine G&O Co of Utah, LLC

DAILY DRILLING REPORT

API# 43-041-30031

DATE	WELL	CONTRACTOR	COUNTY, STATE	SPUD DATE	AFE	SUPERVISOR	
07/24/04	Wolverine Federal 17-2	CDOT Rig#10	Sevier, UT	07/02/04		Steve Hash	
DAYS F/ SPUD	PRESENT OPERATIONS	TOTAL DEPTH	PROGRESS	DRILLIN 3 TIME	ROP	FORMATION	AUTH. DEPTH
22	Circulating @ core point	5,716	170	11.25	15.1	Lime, Sh, Anhy	6,650

MUD DATA

WT	VIS.	WL	CK	PH	SAND	SOLIDS %	PV	YP	GELS	DEPTH	DATE/TIME	CHLORIDES	CALCIUM	MBT	SALT PPM
9.8	36	8.0	tr	7.5	0.00	0.8	8	11	3/6	5716	7/23/04 8:30pm	95,000	180		157,000

BIT DATA

BIT NO.	SIZE	MFG.	TYPE	IADC CODE	SERIAL NO.	JETS (1/32nd or TFA			IN	OUT	FOOTAGE	HOURS	ROP	MTR	RPM RT+MTR	WOB	DULL CONDITION		
						T	B	G											
4	6-1/4"	SDBS	SEB709	617Y	10553769	18	18	18	5435	5454	19	0.50	38.0	N	80/90	20			
4R	6-1/4"	SDBS	SEB709	617Y	10553769	12	12	12	5454		281	11.75	23.9	Y	130/50	20			
													#DIV/0!	Y					
													#DIV/0!						

HYDRAULICS

[illegible]

SLOW PUMP

[illegible]

DRILL STRING

BOTTOMHOLE ASSEMBLY	LENGTH	O.D.	I.D.	FORMATION	ID	TVD	LITHOLOGY	RIG INFO
6-1/4 Bit	0.75	6.250		Lime				Rig No: (435) 979-4844
Motor (1.5 degr -	18.47	4.750						Cell No. (918) 629-9801
dble pin xo	1.88	4.125						Last BOP Test 7/20
monel DC	28.82	4.750		BOTTOMS UP TIME	BG GAS	GAS DATA CONNECTIONS	TRIP GAS	Next BOP Test 7/27
MWD Pulsar	5.64	4.750		36	23			Last Safety Meeting 7/23
Float sub	3.02	4.750				SHOW TO	ROP (FTHR)	Last BOP Drill 7/20
26 jts - spiral HWDP	803.10	4.750	2.125	GAS UNITS	FROM			Last Operate Pipe Ram 7/20
								Last Operate Blind Ram 7/22
								Last Operate Annular 7/23
Total BH-A:	861.68							
STRING WT.	BHA WT.	HU WT.	SO WT.	ROT. TORQUE	GRD. ELEVATION	GL TO KB	KB ELEVATION	INTERMEDIATE CSG
80	20	120	60		5,835	12	5,847	7" @ 5435
								LAST CASING 7" @ 5435
								NEXT CASING 4-1/2" @ 6650

GEOLOGIC

BOTTOMHOLE ASSEMBLY	LENGTH	O.D.	I.D.	FORMATION	ID	TVD	LITHOLOGY	RIG INFO
6-1/4 Bit	0.75	6.250		Lime				Rig No: (435) 979-4844
Motor (1.5 degr -	18.47	4.750						Cell No. (918) 629-9801
dble pin xo	1.88	4.125						Last BOP Test 7/20
monel DC	28.82	4.750		BOTTOMS UP TIME	BG GAS	GAS DATA CONNECTIONS	TRIP GAS	Next BOP Test 7/27
MWD Pulsar	5.64	4.750		36	23			Last Safety Meeting 7/23
Floater sub	3.02	4.750				SHOW TO	ROP (FTHR)	Last BOP Drill 7/20
26 jts - spiral HWDP	803.10	4.750	2.125	GAS UNITS	FROM			Last Operate Pipe Ram 7/20
								Last Operate Blind Ram 7/22
								Last Operate Annular 7/23
Total BHA:	861.68							
STRING WT.	BHA WT.	HU WT.	SO WT.	ROT. TORQUE	GRD. ELEVATION	GL TO KB	KB ELEVATION	INTERMEDIATE CSG
80	20	120	60		5,835	12	5,847	7" @ 5435
								LAST CASING NEXT CASING
								7" @ 5435 4-1/2" @ 6650

GENERAL INFO

BOTTOMHOLE ASSEMBLY	LENGTH	O.D.	I.D.	FORMATION	ID	TVD	LITHOLOGY	RIG INFO
6-1/4 Bit	0.75	6.250		Lime				Rig No: (435) 979-4844
Motor (1.5 degr -	18.47	4.750						Cell No. (918) 629-9801
dbi pin xo	1.88	4.125						Last BOP Test 7/20
monel DC	28.82	4.750		BOTTOMS UP TIME	BG GAS	GAS DATA CONNECTIONS	TRIP GAS	Next BOP Test 7/27
MWD Pulsar	5.64	4.750		36	23			Last Safety Meeting 7/23
Float sub	3.02	4.750		GAS UNITS	FROM	SHOW TO	ROP (FTHR)	Last BOP Drill 7/20
26 jts - spiral HWDP	803.10	4.750	2.125					Last Operate Pipe Ram 7/20
								Last Operate Blind Ram 7/22
								Last Operate Annular 7/23
Total BHA:	861.68							
STRING WT.	BHA WT.	PU WT.	SO WT.	ROT. TORQUE	GRD. ELEVATION	GL TO KB	KB ELEVATION	INTERMEDIATE CSG
80	20	120	60		5,835	12	5,847	7" @ 5435
								LAST CASING 7" @ 5435
								NEXT CASING 4-1/2" @ 6650

SURVEYS

MD	INCL	AZMUTH	TVD	SECTION	N+ / S-	E+ / W-	DLS	TOOL	MD	INCL	AZMUTH	TVD	SECTION	N+ / S-	E+ / W-	DLS	TOOL
5.565	1.60	158.00	5543	-3.94	-43.98	-104.01	2.60	mmwd	5.661	2.90	122.90	5639	-0.46	-46.67	-101.56	2.35	mmwd
5.597	2.10	145.50	5575	-2.92	-44.87	-103.51	2.00	mmwd	5.676	3.20	113.90	5654	0.17	-47.05	-100.86	3.76	mmwd

DAILY ACTIVITY

FROM	TO	HRS	LAST 24 HOURS:
6:00	2:00	8.00	Drilling 5605 to 5706; 101 ft in 8 hrs = 13.8 fph; rotate 40' / slide 6'. Drilling Brk 5703' to 5706'
2:00	2:30	0.50	Check flow, 8 bbl pit gain, SWI @ 2:15pm, SIDPP 450 psi in 15min, stabilized, calc 10ppg kill wt mud
2:30	7:45	5.25	Monitor well, hold safety mtg, begin circ out on choke @ SPR, shut down, cond gas cut mud & incr MW to 8.75ppg, complete 1
7:45	9:00	1.25	Go off choke, resume circ & cond gas cut mud down flowline, incr to 9.2 ppg, check flow, ~ 1/8 bpm
9:00	9:30	0.50	Resume drlg 5706' to 5716'; rotate 10', pick core point @ 5716'
9:30	10:30	1.00	Circ samples, chek flow @ ~1/8 bpm, 9.2ppg, 36 vis, 8 wl, 157,000ppm salt
10:30	0:00	7.50	Continue to incr MW with salt to 9.8 ppg, prep to short trip into csg
			Note: Omni notified for 10pm tonight, still waiting on 2nd NQL core hand
			Fuel: 352 gals
			Mud usage: 3 anco drill, 1 alstearate, 3 anco pac, 569 salt, 7 flozan, 6 defoam, 2 liq flozan
Daily Total		24.00	

APH# 43-041-30031

APH# 43-041-30031

DAILY ACTIVITY			
FROM	TO	HRS	LAST 24 HOURS:
6:00	8:00	2.00	Coring from 5739 to 5746
8:00	9:00	1.00	Break core & drop survey
9:00	1:00	4.00	TOH chaining to 4600'
1:00	4:00	3.00	Laydown core #1, pickup 2nd core bbl & monel
4:00	8:00	4.00	TIH
8:00	2:00	6.00	Coring from 5746 to 5765
2:00	2:30	0.50	Mud gasged up, suspended coring, well flowing, SWI, no pressure
2:30	3:30	1.00	Change out rotating head rubber
3:30	6:00	2.50	Circ & condition, raise mud wt to 10ppg, prep to core ahead
			Note: NQL coring, Omni lab, WRF Driller & MWD on standby
			Fuel: 336 gals
			Mud usage: 0 anco drill, 0 alstearate, 0 anco pac, 0 salt, 0 flozan, 0 defoam, 0 liq flozan
Daily Total		24.00	

APH# 43-041-30031

COST DATA

Engineering & Supervision						EXACT Engineering, Inc.							(918) 599-9400							
Operator: Wolverine G&O Co of Utah, LLC						DAILY DRILLING REPORT							API# 43-041-30031							
DATE 07/28/04		WELL Wolverine Federal 17-2		CONTRACTOR CDDT Rig #10		COUNTY, STATE Sevier, UT		SPUD DATE 07/02/04		AFE		SUPERVISOR Steve Hash								
DAYS F/ SPUD 26		PRESENT OPERATIONS Circ for DST @ 5860		TOTAL DEPTH 5,860		PROGRESS 54		DRILLING TIME		ROP #DIV/0!		FORMATION AUTH. DEPTH Lime 6,650								
MUD DATA																				
WT	VIS	WL	CK	PH	SAND	SOLIDS %	PV	YP	GELS	DEPTH	DATE/TIME	CHLORIDES	CALCIUM	MBT	SALT PPM					
9.8	37	6.4	1/64	8.0	tr	2.0	7	9	4/6	5807	7/27/04 8:30pm	158,000	1300		260,700					
BIT DATA																				
BIT NO.	SIZE	MFG.	TYPE	IADC CODE	SERIAL NO.	JETS (1/32nd or TFA)	IN	OUT	FOOTAGE	HOURS	ROP	MTR	RPM RT+MTR	WOB	DULL CONDITION T B G					
5	6-1/8"	DPI	FO3FD	diamond	1963451	1.32	5716	5746	30	8.50	3.5	N	50	10-12						
5R	6-1/8"	DPI	FO3FD	diamond	1963451	1.32	5746	5766	20	6.00	3.3	N	70	12						
6	6-1/8"	DPI	4O3FD	diamond	2016481	1.32	5766	5807	41	7.50	5.5	N	70	12						
4R	6-1/4"	SDBS	SEB709	617Y	10553769	12 12 12	5807	5860	334	15.25	21.9	Y	50/130	20						
HYDRAULICS													SLOW PUMP							
PUMP NO.	MANUFACTURER	LINER	STROKE LENGTH	GAL / STK	SPM	GPM	AV DP	AV DC	PUMP PRESS.	MTR DIFF PRESS.	HHP / IN ²	ECD		29 spm	43spm	100 spm				
1	Wilson 600	5"	14	3.8	68	258	242	242	1400					1	290					
2	Wilson 600	5"	14											2						
Both																				
DRILL STRING						GEOLOGIC						GENERAL INFO								
BOTTOMHOLE ASSEMBLY	LENGTH	O.D.	I.D.	FORMATION	MD	TVD	LITHOLOGY	RIG INFO												
DPI core bit 6.125 x 3.5	0.50	6.125		Lime				Rig No: (435) 979-4844												
(2) core bbl	65.30	5.750						Cell No. Steve (918) 629-9801												
x-over w/ float	1.02							Last BOP Test 7/20												
float sub	3.02							Next BOP Test 7/27												
monel DC	30.70	4.750						Last Safety Meeting 7/26												
hydraulic jars	6.60		2.000					Last BOP Drill 7/25												
26 jts - spiral HWDP	803.10	4.750	2.125					Last Operate Pipe Rams 7/23												
								Last Operate Blind Ram 7/22												
								Last Operate Annular 7/25												
Total BHA:	910.24																			
STRING WT:	BHA WT:	PO WT:	SO WT:	ROT. TORQUE	GRD. ELEVATION	GL TO RB	KB ELEVATION	INTERMEDIATE CSG	LAST CASING		NEXT CASING									
78	20	120	60		5,835	12	5,841	7" @ 5435	7" @ 5435		4-1/2" @ 6650									
SURVEYS																				
MD	INCL	AZIMUTH	TVD	SECTION	N+/-	E+/-	DLS	TOOL	MD	INCL	AZIMUTH	TVD	SECTION	N+/-	E+/-	DLS	TOOL			
5,694	3.10	116.90	5672	0.93	-47.47	-99.96	1.07	mwd	5,758	2.50	112.80	5736	3.34	-48.32	-97.14	1.03	mwd			
5,726	2.80	115.80	5704	2.22	-48.20	-98.49	0.95	mwd	5,790	2.50	114.40	5768	4.39	-49.37	-95.86	0.22	mwd			
DAILY ACTIVITY																				
FROM	TO	HRS	LAST 24 HOURS:																	
6:00	6:30	0.50	Coring, no progress																	
6:30	11:00	4.50	TOH w/ core barrel																	
11:00	1:00	2.00	Laydown core #3																	
1:00	1:30	0.50	service rig																	
1:30	3:00	1.50	Pickup MWD BHA																	
3:00	6:00	3.00	TIH																	
6:00	7:00	1.00	Install rotating head																	
7:00	9:00	2.00	Ream 6-1/8" to 6-1/4" from 5682' to 5806' / 2-4 pts @ 50/140 rpm; obtain surveys as above																	
9:00	12:30	3.50	Drill from 5806' to 5860' - svy then suspend drilling to run DST of Twin Creek Lime open hole section 5435' to 5860' (435')																	
12:30	1:30	1.00	Circ																	
1:30	2:00	0.50	Pull 7 stands into 7" csg																	
2:00	6:00	4.00	circulate - waiting on DST tools																	
			Note: NQL coring & Omni lab on standby; WRF Driller & MWD on active;																	
			Fuel: 420 gals																	
			Mud usage: 0 anco gel, 175 calc salt, 0 anco bar, 0 caustic, 0 desc, 0 alstearate, 0 anco pac, 0 salt, 5 flozan, 1 defoam, 0 liq flo																	
D																				

Engineering & Supervision				EXACT Engineering, Inc.				(918) 599-9400				
Operator: Wolverine G&O Co of Utah, LLC				DAILY DRILLING REPORT				AP# 43-041-30031				
DATE 07/29/04		WELL Wolverine Federal 17-2		CONTRACTOR CDDT Rig#10		COUNTY, STATE Sevier, UT		SPUD DATE 07/02/04		SUPERVISOR Steve Hash		
DAYS F/ SPUD 27		PRESENT OPERATIONS TOH		TOTAL DEPTH 5,860		PROGRESS 0		DRILLING TIME #DIV/0!		AUTH. DEPTH 6,650		
MUD DATA												
WT	VIS	WL	CK	PH	SAND	SOLIDS %	PV	YP	GELS	DEPTH	DATE/TIME	
9.8	37	6.4	1/84	8.0	tr	2.0	7	9	4/6	5807	7/27/04 8:30pm	
BIT DATA												
BIT NO.	SIZE	MFG.	TYPE	IADC CODE	SERIAL NO.	JETS (1/32nd" or TFA)	IN	OUT	FOOTAGE	HOURS	ROP	
5	6-1/8"	DPI	FO3FD	diamond	1963451	1.32	5716	5746	30	8.50	3.5	
5R	6-1/8"	DPI	FO3FD	diamond	1963451	1.32	5746	5766	20	6.00	3.3	
6	6-1/8"	DPI	4O3FD	diamond	2016481	1.32	5766	5807	41	7.50	5.5	
4R	6-1/4"	SDBS	SEB709	617Y	10553769	12 12 12	5807	5860	334	15.25	21.9	
HYDRAULICS												
PUMP NO.	MANUFACTURER	LINER	STROKE LENGTH	GAL / STK	SPM	GPM	AV DP	AV DC	PUMP PRESS.	MTR DIFF PRESS.	HHP / IN ²	
1	Wilson 600	5"	14	3.8	68	258	242	242	1400			
2	Wilson 600	5"	14									
SLOW PUMP												
										28 spm	30spm	100 spm
										1	270	
										2		350
DRILL STRING												
BOTTOMHOLE ASSEMBLY		LENGTH	O.D.	I.D.	FORMATION	MD	TVD	LITHOLOGY				
6-1/4 Bit		0.75	6.250		Lime							
Motor (1.0 deg)		18.47	4.750									
dbl pin xo		1.88	4.125									
monel DC		28.82	4.750									
MWD Pulsar		5.64	4.750									
Float sub		3.02	4.750									
26 jts - spiral HWDP		803.10	4.750	2.125								
Total BHA:		861.68										
STRING WT.		BHA WT.	PO WT.	SO WT.	ROT. TORQUE	GRD. ELEVATION	GL TO RB	RB ELEVATION	INTERMEDIATE CSG	LAST CASING	NEXT CASING	
78		20	120	60		5,835	12	5,841	7" @ 5435	7" @ 5435	4-1/2" @ 6650	
GEOLOGIC												
GENERAL INFO												
Rig No: (435) 979-4644												
Cell No. Steve (918) 629-9801												
Last BOP Test 7/20												
Next BOP Test 8/20												
Last Safety Meeting 7/28												
Last BOP Drill 7/25												
Last Operate Pipe Ram 7/28												
Last Operate Blind Ram 7/28												
Last Operate Annular 7/28												
SURVEYS												
MD	INCL	AZMUTH	TVD	SECTION	N+ / S-	E+ / W-	DLS	TOOL	MD	INCL	AZMUTH	
5,694	3.10	116.90	5672	0.93	-47.47	-99.96	1.07	mwd	5,758	2.50	112.80	
5,726	2.80	115.80	5704	2.22	-48.20	-98.49	0.95	mwd	5,790	2.50	114.40	
DAILY ACTIVITY												
FROM	TO	HRS	LAST 24 HOURS:									
6:00	10:30	16.50	Circulate with bit @ 5360' in prep for DST (lay flowline for DST, build premix pit to 11ppg, set mud/gas separator #2 while circ)									
10:30	11:00	0.50	TIH to btm									
11:00	2:00	3.00	Displace 100 bbls new 11ppg mud over 1 full circ to raise MW from 9.7 to 10 ppg, circ & cond mud									
2:00	6:00	4.00	TOH for DST									
NOTE:												
Note: NQL coring & Omni lab on standby; WRF Driller & MWD on standby; Rebel testing active												
Fuel: 378 gals												
Mud usage: 0 anco gel, 245 calc salt, 0 anco bar, 0 caustic, 0 desco, 0 alstearate, 0 anco pac, 0 salt, 3 flozan, 1 defoam, 4 liq flo												
DAILY TOTAL												
Daily Total		24.00										
COST DATA												

APR# 43-041-30031

COST DATA

(918) 599-9400

Operator: Wolverine G&O Co of Utah, LLC

DAILY DRILLING REPORT

APH# 43-041-30031

DATE	WELL	CONTRACTOR	COUNTY, STATE	SPUD DATE	AFE	SUPERVISOR	
07/31/04	Wolverine Federal 17-2	CCDT Rig #10	Sevier, UT	07/02/04		Steve Hash	
	PRESENT OPERATIONS	TOTAL DEPTH	PROGRESS	DRILLER G TIME	ROP	FORMATION	AUTH. DEPTH
29	Pump repair	6,029	169	13.50	12.5	Limestone	6,650

MUD DATA

WT	VIS.	WL	CK	PH	SAND	SOLIDS %	PV	YP	GELS	DEPTH	DATE/TIME	CHLORIDES	CALCIUM	MBT	SALT PPM
10.0	36	11.8	1/32	7.0	tr	2.1	8	11	5/6	6029	7/29/04 8:30pm	176,000	51200		

BIT DATA

[illegible]

HYDRAULICS

[illegible]

SLOW PUMP

	1	28 spm	40spm	
	2	30spm	41spm	
1		350	700	
2		250	500	

DRILL STRING

BOTTOMHOLE ASSEMBLY	LENGTH	O.D.	I.D.	FORMATION	MD	TVC	LITHOLOGY	RIG INFO	
6-1/4 Bit	0.75	6.250		Lime				Rig No:	(435) 979-484
Motor (1.0 deg)	18.47	4.750						Cell No. Steve	(918) 629-980
dbl pin xo	1.88	4.125						Last BOP Test	7/20
monel DC	28.82	4.750		BOTTOMS UP TIME	BG GAS	GAS DIA / A CONN GAS	TRIP GAS	Next BOP Test	8/20
MWD Pulsar	5.64	4.750		36				Last Safety Meeting	7/29
Floater sub	3.02	4.750				SHOW S TO	ROP (FTHR)	Last BOP Drill	7/25
26 jts - spiral HWDP	803.10	4.750	2.125					Last Operate Pipe Rams	7/30
								Last Operate Blind Rams	7/30
								Last Operate Annular	7/30
Total BHA:	861.68								
STRING WT.	BHA WT.	POWT.	ROT. TORQUE	GRD. ELEVATION	GL TO KB	KB ELEVATION	INTERMEDIATE CSG	LAST CASING	NEXT CASING
78	20	120	60	5,835	12	5,847	7" @ 5435	7" @ 5435	4-1/2" @ 865

GEOLOGIC

GENERAL INFO

SURVEYS

MD	INCL	AZMUTH	TVD	SECTION	N+ / S-	E+ / W-	DLS	TOOL	MD	INCL	AZMUTH	TVD	SECTION	N+ / S-	E+ / W-	DLS	TOOL
5.822	2.20	107.20	5800	5.33	-49.84	-94.64	1.31	mwd	5.886	0.60	16.50	5864	5.92	-49.89	-93.34	3.75	mwd
5.854	1.20	92.10	5832	5.89	-50.04	-93.72	3.40	mwd	5.918	1.10	334.80	5896	5.48	-49.45	-93.42	2.39	mwd

DAILY ACTIVITY

FROM	TO	HRS	LAST 24 HOURS	
6:00	1:00	7.00	Drilling from 5860' to 5956'	
1:00	1:30	0.50	Rig service	
1:30	8:00	6.50	Drilling from 5956' to 6029'	
8:00	9:00	1.00	Downhole motor pressured up, circ samples while prep to TOOH	
9:00	12:00	3.00	TOOH	
12:00	2:00	2.00	Pull rotating head rubber, pull HWDP, laydown motor	
2:00	3:00	1.00	Pickup & adjust new motor to 1 degr, make up BHA	
3:00	4:00	1.00	TIH to 2600'	
4:00	6:00	2.00	Rig repair - pump #1 & #2	
			additional surveys: 5950, 1.8 deg, 325 AZ / 5982, 2.1 deg, 321 AZ	
			Note: NQL coring & Omni lab on standby; WRF Driller & MWD active	
			Fuel: 168 gals	
			Mud usage: 0 anco gel, 0 calc salt, 0 anco bar, 0 caustic, 2 xcide	1 cedar fiber, 8 drill detergent, 0 salt, 0 flozan, 0 defoam
Daily Total		24.00		

COST DATA

CONFIDENTIAL

EXACT Engineering, Inc.

www.exactengineering.com

415 S. Boston Ave., Suite 734, Tulsa, OK 74103 • (918) 599-9400 • (918) 599-9401 (fax)

Steven R. Hash, P.E.
Registered Professional Engineer
stevehash@exactengineering.com

CONFIDENTIAL

October 5, 2004

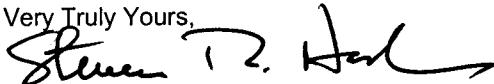
Mr. Dustin Doucet
Utah Division of Oil, Gas & Mining
1594 West North Temple, Suite 1210
Salt Lake City, UT 84114-5801

Re: Wolverine Federal 17-2 well
Sec 17 T23S R01W
Sevier Co., UT
API# 43-041-30031

Dear Mr. Doucet,

On behalf of Wolverine Gas and Oil Company of Utah, LLC, please find enclosed daily activity reports for the subject well from August 1, 2004 through the last drilling report on August 23, 2004. Operations have been temporarily suspended pending acquisition of flowline rights-of-way and while waiting on completion rig availability. Completion operations are expected to resume by mid-October. Wolverine respectfully request that this information remain confidential for the maximum period allowed. As always, please contact either Wolverine or me if there are further questions.

Very Truly Yours,



Steven R. Hash
Agent for Wolverine Gas and Oil Company of Utah, LLC

Copies with attachments via email to:

Wolverine – Gary Bleeker, Richard Moritz, Sue Benson, Sid Jansma, Jr., Tim Brock
EXACT Engineering – well file

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OCT 12 2004

DIV. OF OIL, GAS & MINING

Petroleum Engineering Consulting, Personnel & Jobsite Supervision
complete well design, construction & management, drilling, completion, production, pipelines, appraisals,
due diligence, acquisitions, procedures, temporary personnel and field supervision

(918) 599-9400

Operator: Wolverine G&O Co of Utah, LLC

DAILY DRILLING REPORT

APR 43-041-30031

DATE	WELL	CONTRACTOR	COUNTY, STATE	SPUD DATE	AFE	SUPERVISOR	
08/01/04	Wolverine Federal 17-2	CCDT Rig#10	Sevier, UT	07/02/04		Steve Hash	
	PRESENT OPERATIONS	TOTAL DEPTH	PROGRESS	DRILLING TIME	ROP	FORMATION	AUTH. DEPTH
30	Coring @ 6090	6,090	61	7.50	8.1	Limestone	6,650

MUD DATA

WT	VIS.	WL	CK	PH	SAND	SOLIDS %	PV	YP	GELS	DEPTH	DATE/TIME	CHLORIDES	CALCIUM	MBT	SALT PPM
10.0	36	11.8	1/32	7.0	tr	2.1	8	11	5/6	6029	7/29/04 8:30pm	176,000	51200		

BIT DATA

BIT NO.	SIZE	MFG.	TYPE	IADC CODE	SERIAL NO.	JETS (1/32nd) or TFA			IN	OUT	FOOTAGE	H HRS	ROP	MTR	RPM RT+MTR	WOB	DULL CONDITION			
						T	B	G												
4R	6-1/4"	SDBS	SEB709	617Y	10553769	12	12	12	5860	6029	503	27.75	18.1	Y		50/130	20			
7	6-1/4"	SDBS	SEB709	617Y	10556908	13	13	13	6029	6084				Y						
6R	6-1/8"	DPI	403FD	diamond	2016481		1.32		6084		47	11.50	4.9	N	70	12				

HYDRAULICS

[illegible]

SLOW PUMP

	1	28 spm	40spm	
	2	30spm	41spm	
1		350	700	
2		250	500	

DRILL STRING

BOTTOMHOLE ASSEMBLY	LENGTH	O.D.	I.D.
DPI core bit 6.125 x 3.5	0.90	6.125	
core bbl 5.75	65.00		
hydraulic jars	6.60		
xover	1.07		2.000
26 jts - spiral HWDP	803.10	4.750	2.125
Total BHA:	876.67		
STRING WT.	BHA WT.	SOWT.	ROT. TORQUE
78	20	60	

GEOLOGIC

[illegible]

GENERAL INFO

RIG INFO	
Rig No:	(435) 979-4644
Cell No. Steve	(918) 629-9801
Last BOP Test	7/20
Next BOP Test	8/20
Last Safety Meeting	7/31
Last BOP Drill	7/25
Last Operate Pipe Ram	7/31
Last Operate Blind Ram	7/31
Last Operate Annular	7/31

SURVEYS

MD	INCL	AZMUTH	TVD	SECTION	N+ / S-	E+ / W-	DLS	TOOL	MD	INCL	AZMUTH	TVD	SECTION	N+ / S-	E+ / W-	DLS	TOOL
5,950	1.80	325.40	5927	4.68	-48.76	-93.83	2.30	mmwd	6,014	2.40	323.70	5992	2.39	-46.90	-95.26	1.01	mmwd
5,982	2.10	320.70	5960	3.62	-47.89	-94.49	1.06	mmwd	6,046	2.20	330.90	6024	1.12	-45.82	-95.95	1.10	mmwd

DAILY ACTIVITY

FROM	TO	HRS	LAST 24 HOURS
6:00	8:00	2.00	Rig repair - pump #1 & #2
8:00	9:00	1.00	Rig service
9:00	10:30	1.50	TIH to 2600'
10:30	4:00	5.50	Drilling from 6028 - 6084'
4:00	4:30	0.50	Circ btms up
4:30	8:00	3.50	TOH
8:00	9:30	1.50	Stand back MWD BHA, pick up core BHA,
9:30	1:30	4.00	TIH to 6020
1:30	4:00	2.50	W&R 6020 - 6084
4:00	6:00	2.00	Core #4 from 6084 - 6090 (6' in 2 hrs, avg 20 mpf)
			Note: NQL coring active, Omni lab on standby; WRF Driller & MWD active
			Fuel: 504 gals
			Mud usage: 1 anco pac, 35 calc salt, 0 anco bar, 0 caustic, 0 xcide, 0 cedar fiber, 0 drill detergent, 0 salt, 3 flozan, 0 defoam
Daily Total		24.00	

APH# 43-041-30031

DAILY ACTIVITY			
FROM	TO	HRS	LAST 24 HOURS
6:00	1:00	7.00	Core from 6090 - 6108 (18' in 7 hrs, avg 2.6 fph)
1:00	7:30	6.50	Core barrel jam, pressure up, chain out of hole, wait out lightening storm
7:30	9:30	2.00	Lay down core #3 - 24' of 24' (100% recovery)
9:30	10:00	0.50	Rig service
10:00	3:00	5.00	TIH w/ MWD BHA to ream undergauge core hole
3:00	4:00	1.00	Ream from 5993' to 6108'
4:00	5:30	1.50	Drill from 6108 to 6120
5:30	6:00	0.50	Circ samples @ core point
			Note: drawworks motor #2 has transmission problems, may need changeout, mechanic coming today, running on one motor on
			Note: NQL coring active, Omni lab active; WRF Driller & MWD active
			Fuel: 378 gals
			Mud usage: 0 anco pac, 0 calc salt, 0 anco bar, 0 caustic, 0 xcide, 0 cedar fiber, 0 drill detergent, 0 salt, 0 flozan, 0 defoam
Daily Total		24.00	

Engineering & Supervision										EXACT Engineering, Inc.										(918) 599-9400											
Operator: Wolverine O&G Co of Utah, LLC										DAILY DRILLING REPORT										AP# 43-041-30031											
DATE		WELL		CONTRACTOR		COUNTY, STATE		SPUD DATE		AFE		SUPERVISOR		DATE		WELL		CONTRACTOR		COUNTY, STATE		SPUD DATE		AFE		SUPERVISOR					
08/03/04		Wolverine Federal 17-2		CDDT Rig#10		Sevier, UT		07/02/04				Steve Hash																			
DAYS F/SPUD		PRESENT OPERATIONS		TOTAL DEPTH		PROGRESS		DRILLING TIME		ROP		FORMATION		AUTH. DEPTH																	
32		Rig Repair		6,120		0		0.00		#DIV/0!		Sand		6,650																	
MUD DATA																															
WT		VIS		WL		CK		PH		SAND		SOLIDS %		PV		YP		GELS		DEPTH		DATE/TIME		CHLORIDES		CALCIUM		MBT		SALT PPM	
9.8		34		13.0		1/32		7.0		tr		2.5		7		4		3/4		6120		8/2/04 8:30pm		168,000		49000					
BIT DATA																															
BIT NO.		SIZE		MFG.		TYPE		IADC CODE		SERIAL NO.		JETS (1/32nd" or TFA)		IN		OUT		FOOTAGE		HOURS		ROP		MTR		RPM		WOB		DULL CONDITION	
4R		6-1/4"		SDBS		SEB709		617Y		10553769		12 12 12		5860		6029		503		27.75		18.1		Y		50/130		20			
7		6-1/4"		SDBS		SEB709		617Y		10556908		13 13 13		6029		6084		55		5.50		10.0		Y		50/130		20		in	
6R		6-1/8"		DPI		4O3FD		diamnd		2016481		1.32		6084		6108		65		7.00		3.8		N		70		12-14		out	
7R		6-1/4"		SDBS		SEB709		617Y		10556908		13 13 13		6108		6120		12		1.50		8.0		Y		50/130		20			
HYDRAULICS																															
PUMP NO.		MANUFACTURER		LINER		STROKE LENGTH		GAL / STK		SPM		GPM		AV DP		AV DC		PUMP PRESS.		MTR DIFF. PRESS.		HHP / IN ²		ECD							
1		Wilson 600		5"		14		3.8		60		228						1800													
2		Wilson 600		5"		14																									
Both																															
SLOW PUMP																															
GENERAL INFO																															
BOTTOM-ASSEMBLY		LENGTH		O.D.		I.D.		FORMATION		MD		TVD		LITHOLOGY		RIG INFO															
DPI core bit 6.125 x 3.5		0.90		6.125				Lime								Rig No: (435) 979-4844															
core bbl 5.75		65.00														Cell No. Steve (918) 629-9801															
hydraulic jars		6.60														Last BOP Test															
xover		1.07				2.000		BOTTOMS UP TIME		BG GAS		GAS DAT. CORRECTION																			

[illegible]

Engineering & Supervision		EXACT Engineering, Inc.		(918) 599-9400	
Operator: Wolverine G&O Co of Utah, LLC		DAILY DRILLING REPORT		AP# 43-041-30031	
DATE 08/05/04		WELL Wolverine Federal 17-2		CONTRACTOR CDDT Rig#10	
COUNTRY, STATE Sevier, UT		SPUD DATE 07/02/04		SUPERVISOR Steve Hash	
DAYS F7 SPUD 34		PRESENT OPERATIONS TIH		ROD 2.4	
TOTAL DEPTH 6,180		PROGRESS 32		DRILLING TIME 13.50	
FORMATION Sand		AUTH. DEPTH 6,650			
MUD DATA					
WT	VIS	WL	CK	PH	SAND
9.8	32	22.0	1/32	7.0	0.50
SOLIDS % 2.3					
PV	YP	GELS	DEPTH 6180		
3	2	1/2			
BIT DATA					
BIT NO.	SIZE	MFG.	TYPE	IADC CODE	SERIAL NO.
8	6-1/8"	DPI	403FD	diamnd	2016486
9	6-1/8"	DPI	403	diamnd	1963403
JETS (1/32nd" or TFA) 1.32					
IN 6120 OUT 6180 FOOTAGE 60 HOURS 23.50					
HYDRAULICS					
PUMP NO.	MANUFACTURER	LINER	STROKE LENGTH	GAL / STK	SPM
1	Wilson 600	5"	14	3.8	51
2	Wilson 600	5"	14		194
Both					
PUMP GPM AV DP AV DC PUMP PRESS. MTR DIFF PRESS.					
1400					
SLOW PUMP					
HHP / IN ² ECD					
1 26 spm					
2 29 spm					
1 380					
2 460					
DRILL STRING					
GEOLOGIC					
LITHOLOGY					
GENERAL INFO					
RIG INFO					
Rig No: (435) 979-4644					
Cell No. Steve (918) 629-9801					
Last BOP Test 7/20					
Next BOP Test 8/20					
Last Safety Meeting 8/4					
Last BOP Drill 7/25					
Last Operate Pipe Rams 8/4					
Last Operate Blind Rams 8/4					
Last Operate Annular 8/4					
INTERMEDIATE CSG					
LAST CASING NEXT CASING					
7" @ 5435 7" @ 5435 4-1/2" @ 6650					
SURVEYS					
TVD SECTION N+ / S- E+ / W- DLS TOOL					
6,078 1.70 336.80 6055 0.04 -44.85 -96.44 1.68 mwd					
DAILY ACTIVITY					
FROM TO HRS LAST 24 HOURS					
6:00 7:30 13.50 Coring from 6128 - 6180 (52 ft in 13.5 hrs) total 60 ft in 23.5 hrs, avg 2.5 fph					
7:30 1:30 6.00 TOH, chain out to 4500' thru overpull, rotate out remainder of trip, very tight DP connections, string torquing downhole					
1:30 3:30 2.00 Laydown core #5, process, rec 60.5 ft, bit was in gauge but damaged - ring cut on gauge					
3:30 6:00 2.50 Change BHA to 30 ft bbl & non face discharge bit, TIH @ report time (note: 30 ft bbl for shorter "on-bit" times & less rotating torque)					
Note: NQL coring active, Omni lab active; WRF Driller & MWD standby					
Fuel: 302 gals					
Mud usage: 0 anco pac, 0 calc salt, 0 anco bar, 0 caustic, 0 xcide, 0 cedar fiber, 0 drill detergent, 0 salt, 0 flozan, 0 defoam					
Daily Total 24.00					

Engineering & Supervision			EXACT Engineering, Inc.			(918) 599-9400		
Operator: Wolverine G&O Co of Utah, LLC			DAILY DRILLING REPORT			AP# 43-041-30031		
DATE	WELL	CONTRACTOR	COUNTY, STATE	IPID DATE	AFE	SUPERVISOR		
08/06/04	Wolverine Federal 17-2	CCDT Rig#10	Sevier, UT	07/02/04		Steve Hash		
DAYS F/SPUD	PRESENT OPERATIONS	TOTAL DEPTH	PROGRESS	DRILLING TIME	ROP	FORMATION	AUTH. DEPTH	
35	Working stuck pipe	6,207	27	5.75	4.7	Sand	6,650	
MUD DATA								
WT	VIS	WL	CK	PH	SAND	SOLIDS %	PV	YP
9.8	32	22.0	1/32	7.0	0.50	2.3	3	2
DATE/TIME								
8/4/04 7:30pm								
CHLORIDES								
152,000								
CALCIUM								
40000								
MBT								
SALT PPM								
BIT DATA								
BIT NO.	SIZE	MFG.	TYPE	IADC CODE	SERIAL NO.	JETS (1/32nd" or TFA)	IN	OUT
8	6-1/8"	DPI	403FD	diamnd	2016486	1.32	6120	6180
9	6-1/8"	DPI	403	diamnd	1963403		6180	
FOOTAGE								
23.50								
HOURS								
27								
ROP								
2.6								
MTR								
N								
RPM								
70-80								
WOB								
22-28								
DULL CONDITION								
ring out								
T B G								
HYDRAULICS								
PUMP NO.	MANUFACTURER	LINER	STROKE LENGTH	GAL / STK	SPM	GPM	AV DP	AV DC
1	Wilson 600	5"	14	3.8	51	194		
2	Wilson 600	5"	14					
PUMP PRESS.								
1400								
MTR DIFF PRESS.								
RHP / IN ²								
ECD								
SLOW PUMP								
1 26 spm								
2 29 spm								
1 380								
2 480								
Both								
DRILL STRING								
BOTTOMHOLE ASSEMBLY	LENGTH	O.D.	I.D.	FORMATION	MD	TVD	LITHOLOGY	
DPI core bit 6.125 x 3.5	0.90	6.125		Lime				
core bbl 5.75	35.40							
hydraulic jars	6.60							
float sub	3.02							
xover	1.07		2.000					
26 jts - spiral HWDP	803.10	4.750	2.125					
Total BHA: 850.09								
STRING WT.	BHA WT.	PU WT.	SO WT.	ROT. TORQUE	GRD. ELEVATION	GL TO KB	KB ELEVATION	INTERMEDIATE CSG
70	20	140	65		5,835	12	5,847	7" @ 5435
SURVEYS								
MD	INCL	AZIMUTH	TVD	SECTION	N+/-	E+/-	DLS	TOOL
6,078	1.70	336.80	6055	0.04	-44.85	-96.44	1.68	mwd
DAILY ACTIVITY								
FROM	TO	HRS	LAST 24 HOURS:					
6:00	8:00	2.00	TIH w/ coring BHA					
8:00	9:00	1.00	Service rig					
9:00	10:30	1.50	TIH					
10:30	2:00	3.50	Wash to btm 60 ft & space out					
2:00	7:45	5.75	Coring from 6180 - 6207 (made 27' in 5.75 hrs, avg 4.7 fph)					
7:45	8:15	0.50	Circulate, crew change					
8:15	8:45	0.50	Stand back kelly, LD 1 jt drill pipe, attempt to laydown space out sub, pulled 180,000# total, 60,000# over hole drag, pipe stuck					
8:45	6:00	9.25	Work stuck pipe 15min, kelly up, attempt to circ, no circ, stand kelly back, work stuck pipe off & on jarring up, made 4' down once					
Continue to work pipe thru night, no success								
11pm, ordered wireline & fishing tools for freepoint & backoff, ETA 10am								
Note: NQL coring active, Omni lab active, WRF Driller & MWD standby								
Fuel: gals								
Mud usage: 0 anco pac, 0 calc salt, 0 anco bar, 0 caustic, 0 xcide, 0 cedar fiber, 0 drill detergent, 0 salt, 0 flozan, 0 defoam								
Daily Total	24.00							

Engineering & Supervision										EXACT Engineering, Inc.										(918) 599-9400									
Operator: Wolverine G&O Co of Utah, LLC										DAILY DRILLING REPORT										AP# 43-041-30031									
DATE 08/07/04		WELL Wolverine Federal 17-2				CONTRACTOR CCDT Rig#10				COUNTY, STATE Sevier, UT				SPUD DATE 07/02/04		AFE		SUPERVISOR Steve Hash											
DAYS F/ SPUD 36		PRESENT OPERATIONS Making up tools				TOTAL DEPTH 6,207				PROGRESS 0				DRILLING TIME				ROP #DIV/0!		FORMATION Sand		AUTH. DEPTH 6,650							

MUD DATA																
WT	VIS.	WL	CK	PH	SAND	SOLIDS %	PV	YP	GELS	DEPTH	DATE/TIME	CHLORIDES	CALCIUM	MBT	SALT PPM	
9.8	34	8.8	1/32	7.0	0.50	2.0	7	4	3/4	5679	8/5/04 8:30pm	153,000	45200			

BIT DATA															
BIT NO.	SIZE	MFG.	TYPE	IADC CODE	SERIAL NO.	JETS (1/32nd" or TFA)	IN	OUT	FOOTAGE	HOURS	ROP	MTR	RPM RT+MTR	WOB	DULL CONDITION
8	6-1/8"	DPI	403FD	diamnd	2016486	1.32	6120	6180	60	23.50	2.6	N	70-80	22-28	
9	6-1/8"	DPI	403	diamnd	1963403		6180				#DIV/0!				

HYDRAULICS														SLOW PUMP			
PUMP NO.	MANUFACTURER	LINER	STROKE LENGTH	GAL / STK	SPM	GPM	AV DP	AV DC	PUMP PRESS.	MTR DIFF. PRESS.	HHP / IN ²	ECO	1	2	28 spm	29 spm	
1	Wilson 600	5"	14	3.8	51	194			1400				1		380		
2	Wilson 600	5"	14										2		480		
Both																	

DRILL STRING				GEOLOGIC				GENERAL INFO				
BOTTOMHOLE ASSEMBLY	LENGTH	O.D.	I.D.	FORMATION	MD	TVD		LITHOLOGY	RIG INFO			
				Lime					Rig No: (435) 979-4844			
									Cell No. Steve (918) 629-9801			
									Last BOP Test 7/20			
									Next BOP Test 8/20			
									Last Safety Meeting 8/5			
									Last BOP Drill 8/4			
									Last Operate Pipe Rams 8/4			
									Last Operate Blind Rams 8/4			
									Last Operate Annular 8/4			
Total BHA: 0.00												
STRING WT.	BHA WT.	PU WT.	SO WT.	ROT. TORQUE	GRD. ELEVATION	GL TO KB	KB ELEVATION	INTERMEDIATE CSG	LAST CASING		NEXT CASING	
70	20	140	65		5,835	12	5,847	7" @ 5435	7" @ 5435		4-1/2" @ 6650	

SURVEYS																	
MD	INCL	AZIMUTH	TVD	SECTION	N+/-	E+/-	DLS	TOOL	MD	INCL	AZIMUTH	TVD	SECTION	N+/-	E+/-	DLS	TOOL
6,078	1.70	336.80	6055	0.04	-44.85	-96.44	1.68	mwd									

DAILY ACTIVITY													
FROM	TO	HRS	LAST 24 HOURS:										
6:00	8:00	2.00	Work stuck pipe 15min, kelly up, attempt to circ, no circ, stand kelly back, work stuck pipe off & on jarring up, made 4' down once										
8:00	3:00	7.00	RU WellServ Wireline & freepoint										
3:00	4:00	1.00	Run stringshot & backoff drillstring @ 5679' in HWDP, RDWL, laydown 2 ts, kelly up, resume full circ										
4:00	8:00	4.00	Install rotating head rubber & condition mud while waiting on drilling jars to arrive										
8:00	1:00	5.00	TOH w/ DP & 13 of 26 HWDP, lay down btm jt										
1:00	5:30	4.50	Circulate while waiting on drilling jars										
5:30	6:00	0.50	Drilling jars arrive, begin making up tools. Will jar down on fish for 10-12 hrs										
Fish in hole: Btm @ 6128' ; Top @ 5679'													
DPI core bit 6.125 x 3.5 x .90'; core bbl 5.75 x 35.82'; hydraulic jars 4.75 x 6.6'; float sub 4.75 x 3.02'; xover 4.75 x 1.07'; 13 jts HWDP 401													
Estimated lost in hole value for fish = \$100,000													
Estimated sidetrack & redrill cost = \$300,000													
Note: NQL coring standby, Omni lab standby, WRF Driller & MWD standby													
Fuel: 294 gals													
Mud usage: 1 anco pac, 0 calc salt, 0 anco bar, 0 caustic, 15 starch, 1 xc de, 0 cedar fiber, 1 drill detergent, 0 salt, 4 flozan, 0 defoam													
Daily Total		24.00											

Engineering & Supervision			EXACT Engineering, Inc.			(918) 599-9400			
Operator: Wolverine G&O Co of Utah, LLC			DAILY DRILLING REPORT			AP# 43-041-30031			
DATE		WELL		CONTRACTOR		COUNTY, STATE		EPUD DATE	
08/08/04		Wolverine Federal 17-2		CDDT Rig#10		Sevier, UT		07/02/04	
DAYS F1 SPUD		PRESENT OPERATIONS		TOTAL DEPTH		PROGRESS		DRILLING TIME	
37		Trip		6,050		0			
ROF		FORMATION		AUTH. DEPTH					
#DIV/0!		Sand		6,650					
MUD DATA									
WT	VIS	WL	CK	PH	SAND	SOLIDS %	PV	YP	GELS
9.8	34	8.8	1/32	7.0	0.50	2.0	7	4	3/4
MUD DATA									
DATE/TIME	CHLORIDES	CALCIUM	MBT	SALT PPM					
8/7/04 6:45pm	153,000	45200							
BIT DATA									
BIT NO.	SIZE	MFG.	TYPE	IADC CODE	SERIAL NO.	JETS (1/32nd or TFA)	IN	OUT	FOOTAGE
8	6-1/8"	DPI	403FD	diamnd	2016486	1.32	6120	6180	60
9	6-1/8"	DPI	403	diamnd	1963403		6180		27
ROF									
2.6									
lost in hole									
MTR									
N									
RPM									
70-80									
WOB									
22-28									
DULL CONDITION									
T B G									
ring cut									
HYDRAULICS									
PUMP NO.	MANUFACTURER	LINER	STROKE LENGTH	GAL / STK	SPM	GPM	AV DP	AV DC	PUMP PRESS.
1	Wilson 600	5"	14	3.8	51	194			1400
2	Wilson 600	5"	14						
Both									
SLOW PUMP									
HHP / IN ²		ECD		1 26 spm		2 29spm			
				1 380		2 460			
DRILL STRING									
BOTTOMHOLE ASSEMBLY	LENGTH	O.D.	I.D.	FORMATION	MD	TVD			
				Lime					
GEOLOGIC									
LITHOLOGY			RIG INFO						
			Rig No: (435) 979-4844						
			Cell No. Steve (918) 629-9801						
			Last BOP Test 7/20						
			Next BOP Test 8/20						
			Last Safety Meeting 8/5						
			Last BOP Drill 8/4						
			Last Operate Pipe Rams 8/4						
			Last Operate Blind Rams 8/4						
			Last Operate Annular 8/4						
Total BHA: 0.00									
STRING WT.	BHA WT.	PU WT.	SO WT.	ROT. TORQUE	GRD. ELEVATION	GL TO KB			
70	20	140	65		5,835	12			
SURVEYS									
MD	INCL	AZMUTH	TVD	SECTION	N+ / S-	E+ / W-			
6,078	1.70	336.80	6055	0.04	-44.85	-96.44			
DAILY ACTIVITY									
FROM	TO	HRS	LAST 24 HOURS:						
6:00	6:30	0.50	Make up jarring BHA; screw in sub, jars, 5 - SDC, HWDP as above						
6:30	10:00	3.50	TIH						
10:00	10:30	0.50	Kelly up, break circ, screw into fish at 5679'						
10:30	11:00	12.50	Jar on fish, no mvmnt dn, ~3 ft mvmnt up, could not sustain, pumped 120 bbl crude oil, staged over 6 hrs, jarred up & down, no suc						
11:00	1:30	2.50	RUWL, run in hole with string shot, backoff at 6050', leave 1 jt HWDP, jars & core bbl in hole						
1:30	2:00	0.50	Circulate bems up						
2:00	6:00	4.00	TOH, lay down drig jars, screw in sub, 2 jts HWDP,						
FISH LEFT IN HOLE: Btm @ 6128'; Top @ 6050'									
DPI core bit 6.125 x 3.5 x .90"; core bbl 5.75 x 35.82"; hydraulic jars 4.75 x 6.6"; float sub 4.75 x 3.02"; xover 4.75 x 1.07"; 1 jt HWDP 30.88;									
Estimated lost in hole value for fish... DPI = \$45,000; Knight Oil Tools \$3,000 = \$48,000 total									
Estimated sidetrack & redrill cost = \$300,000									
Note: NQL coring standby, Omni lab standby, WRF Driller & MWD standb /									
Fuel: 252 gals									
Mud usage: 0 anco pac, 0 calc salt, 0 anco bar, 0 caustic, 0 starch, 0 xcide, 0 cedar fiber, 0 drill detergent, 0 salt, 0 flozan, 0 defoam									
Daily Total		24.00							

Engineering & Supervision		EXACT Engineering, Inc.		(918) 599-9400	
Operator: Wolverine G&O Co of Utah, LLC		DAILY DRILLING REPORT		APH# 43-041-30031	
DATE 08/09/04	WELL Wolverine Federal 17-2	CONTRACTOR CDDT Rig#10	COUNTY, STATE Sevier, UT	SPUD DATE 07/02/04	SUPERVISOR Steve Hash
DAYS F/SPUD 38	PRESENT OPERATIONS WOC	TOTAL DEPTH 5,400	PROGRESS 0	DRILLING TIME	FORMATION AUTH. DEPTH #DNV/OI 8,650
MUD DATA					
WT	VIS	WL	CK	PH	SAND
9.8	43	4.6	1/32	7.0	0.50
SOLIDS %					
0.8					
PV					
9					
YP					
5/8					
GELS					
5679					
DEPTH					
DATE/TIME					
8/8/04 3:00pm					
CHLORIDES					
161,000					
CALCIUM					
47000					
MBT					
SALT PPM					
BIT DATA					
BIT NO.	SIZE	MFG	TYPE	IADC CODE	SERIAL NO.
8	6-1/8"	DPI	403FD	diamnd	2016486
9	6-1/8"	DPI	403	diamnd	1983403
JETS (1/32nd" or TFA)					
1.32					
IN					
6120					
OUT					
6180					
FOOTAGE					
60					
HOURS					
23.50					
ROP					
2.6					
MTR					
N					
RPM					
70-80					
WOB					
22-28					
DULL CONDITION					
T B G					
ring cut					
HYDRAULICS					
PUMP NO.	MANUFACTURER	LINER	STROKE LENGTH	GAL / STK	SPM
1	Wilson 600	5"	14	3.8	51
2	Wilson 600	5"	14		194
AV DP					
AV DC					
PUMP PRESS.					
1400					
MTR DIFF. PRESS.					
HHP / IN ²					
ECD					
SLOW PUMP					
1 26 spm					
2 29 spm					
1 380					
2 460					
DRILL STRING					
BOTTOMHOLE ASSEMBLY	LENGTH	O.D.	I.D.	FORMATION	MD
				Lime	
TVD					
LITHOLOGY					
RIG INFO					
Rig No: (435) 979-4644					
Cell No. Steve (918) 629-9801					
Last BOP Test 7/20					
Next BOP Test 8/20					
Last Safety Meeting 8/8					
Last BOP Drill 8/4					
Last Operate Pipe Rams 8/8					
Last Operate Blind Rams 8/8					
Last Operate Annular 8/4					
Total BHA: 0.00					
STRING WT.	BHA WT.	PU WT.	SO WT.	ROT. TORQUE	GRD. ELEVATION
70	20	140	65		5,835
GL TO KB					
12					
KB ELEVATION					
5,847					
INTERMEDIATE CSG					
7" @ 5435					
LAST CASING					
7" @ 5435					
NEXT CASING					
4-1/2" @ 6650					
SURVEYS					
MD	INCL	AZMUTH	TVD	SECTION	N+ / S-
6,078	1.70	336.80	6055	0.04	-44.85
E+ / W-					
-96.44					
DLS					
1.68					
TOOL					
mwd					
DAILY ACTIVITY					
FROM	TO	HRS	LAST 24 HOURS:		
6:00	9:00	3.00	TOH, lay down drlg jars, screw in sub, 2 jts HWDP,		
9:00	4:30	7.50	PU 10 jts 2-7/8" EUE tbg stinger, xo, THH on 83 stds, tag ledge, circ 14 jts to btm, tag fish @ 6050'		
4:30	5:00	0.50	circulate btms up		
5:00	6:00	1.00	RU Halco, safety mtg, pmp 20 bfw, 29 bbl cmt slurry, 4 bfw & 34 bbl mud; set 165' sx sidetrack plug from TOF @ 6050' to 5285' in		
6:00	6:30	0.50	Pull 10 stands to 5400' in 7" csg		
6:30	7:30	1.00	Circulate btms up, no evident cmt on btms up, will WOC 24 hrs before drilling cement		
7:30	8:00	0.50	Laydown 34 jts DP		
8:00	12:00	4.00	POOH with DP & laydown 10 jts 2-7/8" tbg		
12:00	1:30	1.50	RIH w 22 jts HWDP & 4 new HWDP - total 26		
1:30	6:00	4.50	RU Black Jack Inspection, inspecting HWDP @ report time, WOC until 7pm		
Note: sidetrack plug Class G - Premag 300 - 165sx - 17ppg, 0.99 cfps, 3.78 gps mix wtr, .75% CFR-3					
Note: NQL coring standby, Omni lab standby; WRF Driller & MWD standby					
Fuel: 252 gals					
Mud usage: 1 anco pac, 140 calc salt, 0 anco bar, 1 anco drill, 13 starch, 2 xcide, 1 drill detergent, 0 salt, 4 flozan, 0 defoam					
Daily Total		24.00			

[illegible]

Engineering & Supervision						EXACT Engineering, Inc.							(918) 599-9400							
Operator: Wolverine G&O Co of Utah, LLC						DAILY DRILLING REPORT							AP# 43-041-30031							
DATE 08/12/04		WELL Wolverine Federal 17-2		CONTRACTOR CDDT Rig #10			COUNTY, STATE Sevier, UT				SPUD DATE 07/02/04		AFE		SUPERVISOR Steve Hash					
PRESENT OPERATIONS 41 Drilling				TOTAL DEPTH 5,772			PROGRESS 107		DRILLING TIME 12.00			ROP 8.9		FORMATION Lime		AUTH. DEPTH 6,650				
MUD DATA																				
WT	VIS	WL	CK	PH	SAND	SOLIDS %	PV	YP	GELS	DEPTH	DATE/TIME	CHLORIDES	CALCIUM	MBT	SALT PPM					
9.5+	34	7.6	1/32	7.0	0.00	1.5	6	7	3/5	5688	8/9/04 9:45pm	150,000	37000							
BIT DATA																				
BIT NO.	SIZE	MFG.	TYPE	IADC CODE	SERIAL NO.	JETS (1/32nd or TFA)	IN	OUT	FOOTAGE	HOURS	ROP	MTR	RPM	WOB	DULL CONDITION					
8	6-1/8"	DPI	403FD	diamnd	2016486	1.32	6120	6180	60	23.50	2.6	N	70-80	22-28	T B G ring cut					
9	6-1/8"	DPI	403	diamnd	1963403		6180		27	5.75	4.7	N			LAST					
10	6-1/4"	STC	FDS+		ML0006	13 13 13	5572	5665	93	23.25	4.0	Y	20+130							
7R	6-1/4"	SDBS	SEB709	617Y	10556908	13 13 13	5665		107	12.00	8.9	Y	50/130	20						
HYDRAULICS																				
PUMP NO.	MANUFACTURER	LINER	STROKE LENGTH	GAL / STK	SPM	GPM	AV DP	AV DC	PUMP PRESS.	MTR DIFF. PRESS.	HHP / IN ²	ECD	SLOW PUMP							
1	Wilson 600	5"	14	3.8	69	262			1250	25			1	26 spm						
2	Wilson 600	5"	14										2	29 spm						
Both														460						
DRILL STRING																				
BOTTOMHOLE ASSEMBLY		LENGTH	O.D.	I.D.	FORMATION	MD	TVD					LITHOLOGY		RIG INFO						
6-1/4 Bit		1.00	6.250											Rig No: (435) 979-4644						
Motor (1.75 degr)(.56 r		18.47	4.750											Cell No. Steve (918) 629-9801						
dbl pin xo		1.88	4.125											Last BOP Test 7/20						
monel DC		28.82	4.750											Next BOP Test 8/20						
MWDP Pulsar		5.64	4.750											Last Safety Meeting 8/11						
Float sub		3.00	4.750											Last BOP Drill 8/11						
20 jts - spiral HWDP		615.22	4.750	2.125										Last Operate Pipe Rams 8/11						
Griffith Drig jars		29.97	5.750											Last Operate Blind Ram 8/11						
6 jts - spiral HWDP		185.51	6.750	2.125										Last Operate Annular 8/4						
Total BHA:		889.51																		
STRING WT.	BHA WT.	PU WT.	SO WT.	ROT. TORQUE	GRD. ELEVATION	GL TO KB	KB ELEVATION	INTERMEDIATE CSG		LAST CASING		NEXT CASING								
70	22	120	65		5,835	12	5,847	7" @ 5435		7" @ 5435		4-1/2" @ 6650								
SURVEYS																				
MD	INCL	AZIMUTH	TVD	SECTION	N+/S-	E+/W-	DLS	TOOL	MD	INCL	AZIMUTH	TVD	SECTION	N+/S-	E+/W-					
5,470	3.60	203.60	5448	-7.10	-40.15	-103.25	1.33	mwd	5,593	1.20	273.10	5571	-4.03	-44.09	-104.45					
5,533	1.70	183.70	5510	-4.90	-42.98	-104.14	3.82	mwd	5,627	1.90	314.60	5605	-4.72	-43.69	-105.23					
DAILY ACTIVITY																				
FROM	TO	HRS	LAST 24 HOURS:																	
6:00	11:00	5.00	TOH																	
11:00	6:00	7.00	LD motor, PU bit #7R, PU new mtr, adjust, TIH, test MWDP, scrub sidetrack, wash to btm																	
6:00	6:00	12.00	Drilling from 5665 to 5772																	
Note: WRF Driller & MWDP active																				
Fuel: xxx gals																				
Mud usage: 2 anco gel, 70 calc salt, 0 anco bar, 0 anco drill, 14 starch, 1 xide, 1 anco pac, 0 drill detergent, 0 salt, 0 flozan, 0 defoam																				
Daily Total		24.00	3-1/2" DP - total jts on locn = 190																	

Engineering & Supervision		EXACT Engineering, Inc.				(918) 599-9400											
Operator: Wolverine G&O Co of Utah, LLC		DAILY DRILLING REPORT				API# 43-041-30031											
DATE 08/13/04		WELL Wolverine Federal 17-2		CONTRACTOR CDDT Rig#10		COUNTY, STATE Sevier, UT		SPUD DATE 07/02/04		SUPERVISOR Steve Hash							
PRESENT OPERATIONS 42 Drilling		TOTAL DEPTH 5,934		PROGRESS 162		DRILLING TIME 12.00		ROP 13.5		FORMATION AUTH. DEPTH Lime 6,650							
MUD DATA																	
WT	VIS	WL	CK	PH	SAND	SOLIDS %	PV	YP	GELS	DEPTH							
9.5+	34	7.6	1/32	7.0	0.00	1.5	6	7	3/5	5688							
DATE/TIME 8/9/04 9:45pm																	
CHLORIDES 150,000																	
CALCIUM 37000																	
MBT																	
SALT PPM																	
BIT DATA																	
BIT NO.	SIZE	MFG.	TYPE	IADC CODE	SERIAL NO.	JETS (1/32nd) or TFA	IN	OUT	FOOTAGE	HOURS							
7R	6-1/4"	SDBS	SEB709	617Y	10556908	13 13 13	5665	5786	14	1.00							
11	6-1/4"	SDBS	SEB709	617Y	10553274	13 13 13	5786		148	11.00							
ROP																	
14.0																	
13.5																	
MTR																	
Y																	
RPM																	
50/130																	
20																	
WOB																	
20																	
DULL CONDITION																	
T B G																	
HYDRAULICS																	
PUMP NO.	MANUFACTURER	LINER	STROKE LENGTH	GAL / STK	SPM	GPM	AV DP	AV DC	PUMP PRESS.	MTR DIFF PRESS.							
1	Wilson 600	5"	14	3.8	64	243			1390	65							
2	Wilson 600	5"	14														
Both																	
SLOW PUMP																	
HHP / IN ²																	
ECD																	
1 26 spm																	
2 29spm																	
1 380																	
2 460																	
GENERAL INFO																	
RIG INFO																	
Rig No: (435) 979-4644																	
Cell No. Steve (918) 629-9801																	
Last BOP Test 7/20																	
Next BOP Test 8/20																	
Last Safety Meeting 8/12																	
Last BOP Drill 8/12																	
Last Operate Pipe Rams 8/12																	
Last Operate Blind Rams 8/12																	
Last Operate Annular 8/4																	
LITHOLOGY																	
TRIP GAS																	
425																	
ROD (F/HR)																	
7" @ 5435																	
LAST CASING																	
7" @ 5435																	
NEXT CASING																	
4-1/2" @ 6650																	
DRILL STRING																	
BOTTOMHOLE ASSEMBLY																	
LENGTH																	
O.D.																	
I.D.																	
FORMATION																	
MD																	
TVD																	
6-1/4 Bit 1.00 6.250																	
Motor (1.75 degr) (.56 r) 18.47 4.750																	
dbl pin xo 1.88 4.125																	
monel DC 28.82 4.750																	
MWD Pulsar 5.64 4.750																	
Float sub 3.00 4.750																	
20 jts - spiral HWDP 615.22 4.750 2.125																	
Griffith Drig jars 29.97 5.750																	
6 jts - spiral HWDP 185.51 6.750 2.125																	
Total BHA: 889.51																	
STRING WT. BHA WT. PU WT. SO WT. ROT. TORQUE GRD. ELEVATION GL TO KB KB ELEVATION																	
70 22 120 65 5,835 12 5,847																	
SURVEYS																	
MD	INCL	AZIMUTH	TVD	SECTION	N+ / S-	E+ / W-	DLS	TOOL	MD	INCL	AZIMUTH	TVD	SECTION	N+ / S-	E+ / W-	DLS	TOOL
5,685	2.80	335.70	5663	-7.06	-41.66	-106.43	0.91	mwd	5,749	2.40	318.60	5727	-10.05	-39.00	-107.79	3.12	mwd
5,717	2.90	337.50	5695	-8.59	-40.25	-107.03	0.98	mwd	5,782	2.40	315.00	5760	-11.36	-37.99	-108.73	0.46	mwd
DAILY ACTIVITY																	
FROM	TO	HRS	LAST 24 HOURS:														
6:00	7:00	1.00	Drilling 5772 - 5786														
7:00	8:00	1.00	Motor pressured up, work to evaluate, prep to TOH														
8:00	9:00	1.00	Rig service														
9:00	12:30	3.50	TOH, LD motor, chg bit, PU used motor														
12:30	7:00	6.50	Adjust motor to 1 degr, TIH, chg rotating head rbr, wash thru sidetrack & to btm														
7:00	6:00	11.00	Drilling from 5786 - 5934														
Note: sent 7-6" & 1-8" DC of CDDT to Stewart machine for repair; sent 3 csg for short jts																	
Note: received 2 - 4-3/4" adj motors last nite fr WRF Casper, sent back all core equipment to DPI																	
Note: WRF Driller & MWD active																	
Fuel: xxx gals																	
Mud usage: 0 anco gel, 0 calc salt, 0 anco bar, 0 anco drill, 20 starch, 0 xcide, 1 anco pac, 1 drill detergent, 0 salt, 5 flozan, 0 defoam																	
Daily Total		24.00	3-1/2" DP - total jts on locn = 180														

Engineering & Supervision						EXACT Engineering, Inc.							(918) 599-9400											
Operator: Wolverine G&O Co of Utah, LLC						DAILY DRILLING REPORT							AP# 43-041-30031											
DATE 08/14/04		WELL Wolverine Federal 17-2				CONTRACTOR CDDT Rig #10				COUNTY, STATE Sevier, UT				SPUD DATE 07/02/04		AFE		SUPERVISOR Steve Hash						
		PRESENT OPERATIONS Drilling				TOTAL DEPTH 6,120		PROGRESS 186		DRILLING TIME 23.50		ROP 7.9		FORMATION Sand		AUTH. DEPTH 6,650								
MUD DATA																								
WT		V.S.		WL		CK		PH		SAND		SOLIDS %		P.V.	YP	GELS	DEPT	DATE/TIME		CHLORIDES		CALCIUM	MBT	SALT PPM
9.6		38		4.0		1/32		7.0		0.50		1.8		10	13	6/8	6045	8/13/04 8:00pm		120,000		41000		
BIT DATA																								
B.T.	SIZE	MFG.	TYPE	IADC CODE	SERIAL NO.	JETS (1/32nd) or TFA	IN	OUT	FOOTAGE	HOURS	ROP	MTR	RPM RT-MTR	WOB	DULL CONDITION	T	B	G						
7R	6-1/4"	SDBS	SEB709	617Y	10556908	13 13 13	5665	5786	14	1.00	14.0	Y	50/130	20										
11	6-1/4"	SDBS	SEB709	617Y	10553274	13 13 13	5786		334	34.50	9.7	Y	50/130	20										
HYDRAULICS																								
PUMP NO.	MANUFACTURER	LINER	STROKE LENGTH	GAL / STK	SPM	GPM	AV DP	AV DC	PUMP PRESS.	MTR DIFF PRESS.	HHP / IN ²	ECD	SLOW PUMP											
1	Wilson 600	5"	14	3.8	64	243			1450	65			1	28 spm										
2	Wilson 600	5"	14										2	40spm										
Both															5950'	350	40spm							
GEOLOGIC																								
BOTTOMHOLE ASSEMBLY						FORMATION						GENERAL INFO												
LENGTH O.D. I.D.						MD TVD LITHOLOGY RIG INFO																		
6-1/4 Bit 1.00 6.250												Rig No: (435) 979-4644												
Motor (1.75 degr)/ .56 r 18.47 4.750												Cell No. Steve (918) 629-9801												
dbl pin xo 1.88 4.125												Last BOP Test 7/20												
monel DC 28.82 4.750												Next BOP Test 8/20												
MWD Pulsar 5.64 4.750												Last Safety Meeting 8/13												
Float sub 3.00 4.750												Last BOP Drill 8/13												
20 jts - spiral HWDP 615.22 4.750 2.125												Last Operate Pipe Rams 8/13												
Griffith Drng jars 29.97 5.750												Last Operate Blind Ram 8/13												
6 jts - spiral HWDP 185.51 6.750 2.125												Last Operate Annular 8/4												
Total BHA: 889.51																								
STRING WT. BHA WT. PU WT. SO WT. ROT. TORQUE GRD. ELEVATION GL TO KB KB ELEVATION INTERMEDIATE CSG LAST CASING NEXT CASING																								
70 22 120 65						5,835 12 5,847						7" @ 5435 7" @ 5435 4-1/2" @ 6650												
SURVEYS																								
MD	INCL	AZIMUTH	TVD	SECTION	N+/- S-	E+/- W-	DLS	TOOL MD	INCL	AZIMUTH	TVD	SECTION	N+/- S-	E+/- W-	DLS	TOOL								
5,685	2.60	335.70	5663	-7.06	-41.66	-106.43	0.91	mwd 5,749	2.40	318.60	5727	-10.05	-39.00	-107.79	3.12	mwd								
5,717	2.90	337.50	5695	-8.59	-40.25	-107.03	0.98	mwd 5,782	2.40	315.00	5760	-11.36	-37.99	-108.73	0.46	mwd								
DAILY ACTIVITY																								
FROM	TO	HRS	LAST 24 HOURS:																					
6:00	9:00	15.00	Drilling 5934 - 6046																					
9:00	9:30	0.50	Rig service																					
9:30	6:00	8.50	Drilling 6046 - 6120																					
Note: WRF Driller & MWD active																								
Fuel: 495 gals																								
Mud usage: 0 anco gel, 0 calc salt, 0 anco bar, 0 anco drill, 10 starch, 1 x side, 0 anco pac, 1 drill detergent, 0 salt, 5 flozan, 0 defoam																								
Daily Total	24.00	3-1/2" DP - total jts on locn = 190																						

Engineering & Supervision										EXACT Engineering, Inc.										(918) 599-9400															
Operator: Wolverine G&O Co of Utah, LLC										DAILY DRILLING REPORT										API# 43-041-30031															
DATE		WELL				CONTRACTOR				COUNTY, STATE				SPUD DATE		AFE		SUPERVISOR																	
08/15/04		Wolverine Federal 17-2				CDDT Rig#10				Sevier, UT				07/02/04				Steve Hash																	
44		PRESENT OPERATIONS				TOTAL DEPTH		PROGRESS		DRILLING TIME		ROP		FORMATION		AUTH. DEPTH																			
		Trip				6,280		160		14.50		11.0		Sand		6,650																			
MUD DATA																																			
WT		VIS		WL		CK		PH		SAND		SOLIDS %		PV		YP		GELS		DEPTH		DATE/TIME		CHLORIDES		CALCIUM		MBT		SALT PPM					
9.5+		38		4.0		1/32		7.0		0.50		1.5		9		14		6/8		6278		8/14/04 7:00pm		124,000		42000									
BIT DATA																																			
BIT NO.		SIZE		MFG		TYPE		IADC CODE		SERIAL NO.		JETS (1/32nd" or TFA)		IN		OUT		FOOTAGE		HOURS		ROP		MTR		RPM		WOB		DULL CONDITION					
7R		6-1/4"		SDBS		SEB709		617Y		10556908		13 13 13		5665		5786		14		1.00		14.0		Y		50/130		20							
11		6-1/4"		SDBS		SEB709		617Y		10553274		13 13 13		5786		6280		494		49.30		10.1		Y		50/130		20							
12		6-1/4"		SDBS		SEB709		617Y		10556911		13 13 13		6280																					
HYDRAULICS																		SLOW PUMP																	
PUMP NO		MANUFACTURER		LINER		STROKE LENGTH		GAL / STK		SPM		GPM		AV DP		AV DC		PUMP PRESS		MTR DIFF PRESS		HHP / IN ²		ECD		1		28 spm							
1		Wilson 600		5"		14		3.8		64		243						1450		65						5950'		350							
2		Wilson 600		5"		14																				5950'				600					
Both																																			
DRILL STRING										GEOLOGIC										GENERAL INFO															
BOTTOMHOLE ASSEMBLY				LENGTH		O.D.		I.D.		FORMATION		MD		TVD		LITHOLOGY		RIG INFO																	
6-1/4 Bit				1.00		6.250												Rig No: (435) 979-4644																	
Motor (1.0 degr) (.56 rpm)				18.47		4.750												Cell No. Steve (918) 629-9801																	
dbl pin x o				1.88		4.125												Last BOP Test 7/20																	
monel DC				28.82		4.750				BOTTOMS UP TIME		BG GAS		CONN GAS		TRIP GAS		Next BOP Test 8/20																	
MWD Pulsar				5.64		4.750				30		20						Last Safety Meeting 8/14																	
Float sub				3.00		4.750				GAS UNITS		FROM		SHOWS TO		ROP (FTH/HR)		Last BOP Drill 8/14																	
20 jts - spiral HWDP				615.22		4.750		2.125										Last Operate Pipe Rams 8/14																	
Griffith Drig jars				29.97		5.750												Last Operate Blind Ram 8/14																	
6 jts - spiral HWDP				185.51		6.750		2.125										Last Operate Annular 8/4																	
Total BHA:				889.51																															
STRING WT		BHA WT		PU WT		SO WT		ROT. TORQUE		GRD. ELEVATION		GL TO KB		KB ELEVATION		INTERMEDIATE CSG		LAST CASING		NEXT CASING															
80		22		140		65				5,835		12		5,847		7" @ 5435		7" @ 5435		4-1/2" @ 6650															
SURVEYS																																			
MD		INCL		AZIMUTH		TVD		SECTION		N+ / S-		E+ / W-		DLS		TOOL		MD		INCL		AZIMUTH		TVD		SECTION		N+ / S-		E+ / W-		DLS		TOOL	
6,132		5.70		338.00		6109								1.90		mwd		6,195		6.20		329.10		6171						1.77		mwd			
6,163		6.10		334.30		6140								1.78																					

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Engineering & Supervision								EXACT Engineering, Inc.						(918) 599-9400						
Operator: Wolverine G&O Co of Utah, LLC								DAILY DRILLING REPORT						API# 43-041-30031						
DATE 08/18/04		WELL Wolverine Federal 17-2				CONTRACTOR CDDT Rig#10				COUNTY, STATE Sevier, UT		SPUD DATE 07/02/04		AFE		SUPERVISOR Steve Hash				
		PRESENT OPERATIONS Logging				TOTAL DEPTH 6,750		PROGRESS		DRILLING TIME		ROP #DIV/0!		FORMATION Sand		AUTH. DEPTH 6,650				
MUD DATA																				
WT	VIS.	WL	CK	PH	SAND	SOLIDS %	PV	YP	GELS	DEPTH	DATE/TIME	CHLORIDES	CALCIUM	MBT	SALT PPM					
9.7	38	4.0	1/32	7.0	0.50	3.0	12	16	8/12	6750	8/17/04 5:00pm	126,000	42000							
BIT DATA																				
BIT NO.	SIZE	MFG	TYPE	IADC CODE	SERIAL NO	JETS (1/32nd" or TFA)	IN	OUT	FOOTAGE	HOURS	ROP	MTR	RPM	WOB	DULL CONDITION					
7R	6-1/4"	SDBS	SEB709	617Y	10556908	13 13 13	5665	5786	14	1.00	14.0	Y	50/130	20	T	B G				
11	6-1/4"	SDBS	SEB709	617Y	10553274	13 13 13	5786	6280	494	49.30	10.1	Y	50/130	20						
12	6-1/4"	SDBS	SEB709	617Y	10556911	13 13 13	6280	6750	470	33.30	14.0	Y	25/125	8-10						
HYDRAULICS																				
PUMP NO	MANUFACTURER	LINER	STROKE LENGTH	GAL / STK	SPM	GPM	AV DP	AV DC	PUMP PRESS	MTR DIFF PRESS	HHP IN ²	ECD	SLOW PUMP							
1	Wilson 600	5"	14	3.8	60	228			1420	200			1	28 spm						
2	Wilson 600	5"	14										2	40spm						
Both																				
DRILL STRING						GEOLOGIC						GENERAL INFO								
BOTTOMHOLE ASSEMBLY		LENGTH		O.D.	I.D.	FORMATION		MD		TVD		LITHOLOGY		RIG INFO						
6-1/4 Bit		1.00		6.250										Rig No: (435) 979-4644						
bit sub - float		1.98		4.625										Cell No. Steve (918) 629-9801						
						BOTTOMS UP TIME		BG GAS		CONN GAS		TRIP GAS		Last BOP Test 7/20						
						35		35		0		500		Next BOP Test 8/20						
						GAS UNITS		FROM		SHOWS TO		ROP (FT/HR)		Last Safety Meeting 8/17						
20 jts - spiral HWDP		615.22		4.750		2.125								Last BOP Drill 8/14						
Griffith Drlg jars		29.97		5.750										Last Operate Pipe Rams 8/14						
6 jts - spiral HWDP		185.51		6.750		2.125								Last Operate Blind Ram 8/17						
														Last Operate Annular 8/4						
Total BHA:		833.68																		
STRING WT		BHA WT		PU WT		SO WT		ROT TORQUE		GRD ELEVATION		GL TO KB		KB ELEVATION		INTERMEDIATE CSG				
80		22		140		65				5,835		12		5,847		7" @ 5435				
SURVEYS																				
MD	INCL	AZIMUTH	TVD	SECTION	N+ / S-	E+ / W-	DLS	TOOL	MD	INCL	AZIMUTH	TVD	SECTION	N+ / S-	E+ / W-	DLS	TOOL			
6,576	4.70	288.70	6551				0.94	mwd		5.70	280.40	6684				0.87	mwd			
6,672	5.40	281.80	6647				0.96	mwd									mwd			
DAILY ACTIVITY																				
FROM	TO	HRS	LAST 24 HOURS:																	
6:00	9:00	3.00	TOH, laydown directional tools																	
9:00	10:00	1.00	Service rig																	
10:00	2:30	4.50	TIH w/ bit,HWDWP & jars only, ream 90 ft to btm @ 6750'																	
2:30	4:30	2.00	Circ, mix & pump 35 bbl vis sweep																	
4:30	9:00	4.50	TOH, chain out open hole																	
9:00	10:30	1.50	RU Halliburton Wireline to log																	
10:30	1:00	2.50</																		

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Engineering & Supervision						EXACT Engineering, Inc.								(918) 599-9400																	
Operator: Wolverine G&O Co of Utah, LLC						DAILY DRILLING REPORT								API# 43-041-30031																	
DATE 08/21/04		WELL Wolverine Federal 17-2			CONTRACTOR CDDT Rig#10			COUNTY, STATE Sevier, UT			SPUD DATE 07/02/04		AFE		SUPERVISOR Steve Hash																
50		PRESENT OPERATIONS Trip			TOTAL DEPTH 6,750			PROGRESS		DRILLING TIME ROP #DIV/0!		FORMATION Sand		AUTH. DEPTH 6,650																	
MUD DATA																															
WT		VIS		WL		CK		PH		SAND		SOLIDS %		PV		YP		GELS		DEF TH		DATE/TIME		CHLORIDES		CALCIUM		MBT		SALT PPM	
9.7		38		4.0		1/32		7.0		0.50		3.0		12		16		8/12		67.50		8/17/04 5:00pm		126,000		42000					
BIT DATA																															
BIT NO.		SIZE		MFG		TYPE		IADC CODE		SERIAL NO.		JETS (1/32nd" or TFA)		IN		OUT		FOOTAGE		HOURS		ROP		MTR		RPM RT+MTR		WOB		DULL CONDITION T B G	
7R		6-1/4"		SDBS		SEB709		617Y		10556908		13 13 13		5665		5786		14		1.00		14.0		Y		50/130		20			
11		6-1/4"		SDBS		SEB709		617Y		10553274		13 13 13		5786		6280		494		49.30		10.1		Y		50/130		20			
12		6-1/4"		SDBS		SEB709		617Y		10556911		13 13 13		6280		6750		470		33.50		14.0		Y		25/125		8-10			
HYDRAULICS																					SLOW PUMP										
PUMP NO		MANUFACTURER		LINER		STROKE LENGTH		GAL / STK		SPM		GPM		AV DP		AV DC		PUMP PRESS		MTR DIFF PRESS		HHV * IN ²		ECD		1 28 spm		2 40spm			
1		Wilson 600		5"		14		3.8				0														5950'		350			
2		Wilson 600		5"		14																				5950'				600	
Both																															
DRILL STRING										GEOLOGIC										GENERAL INFO											
BOTTOMHOLE ASSEMBLY				LENGTH		O.D.		I.D.		FORMATION		MD		TVD		LITHOLOGY				RIG INFO											
6-1/4 Bit				1.00		6.250														Rig No: (435) 979-4644											
bit sub - float				1.98		4.625														Cell No. Steve (918) 629-9801											
										BOTOMS UP TIME		BG GAS		GAS DATA CONN GAS		TRIP GAS				Last BOP Test 7/20											
										35										Next BOP Test 8/20											
																SHOWS				Last Safety Meeting 8/17											
										GAS UNITS		FROM		TO		ROP (FT/HR)				Last BOP Drill 8/14											
20 jts - spiral HWDP				615.22		4.750		2.125												Last Operate Pipe Rams 8/14											
Griffith Drlg jars				29.97		5.750														Last Operate Blind Ram 8/17											
6 jts - spiral HWDP				185.51		6.750		2.125												Last Operate Annular 8/4											
Total BHA:				833.68																											
STRING WT.		BHA WT.		PU WT.		SO WT.		ROT. TORQUE		GRD ELEVATION		GL TO KB		KB ELEVATION		INTERMEDIATE CSG				LAST CASING		NEXT CASING									
80		22		140		65				5,835		12		5,847		7" @ 5435				7" @ 5435		4-1/2" @ 6750									
SURVEYS																															
MD		INCL.		AZIMUTH		TVD		SECTION		N+ / S-		E+ / W-		DLS		TOOL		MD		INCL.											

Engineering & Supervision						EXACT Engineering, Inc.							(918) 599-9400															
Operator: Wolverine G&O Co of Utah, LLC						DAILY DRILLING REPORT															API# 43-041-30031							
DATE 08/22/04		WELL Wolverine Federal 17-2				CONTRACTOR CDDT Rig#10				COUNTY, STATE Sevier, UT				SPOD DATE 07/02/04		A/E		SUPERVISOR Steve Hash										
51		PRESENT OPERATIONS WOC				TOTAL DEPTH PBDT 6624'				PROGRESS				DRILLING TIME ROP #DIV/O!				FORMATION Sand		AUTH DEPTH 6,650								
MUD DATA																												
WT	VIS	WL	CK	PH	SAND	SOLIDS %	PV	YP	GELS	DEP H	DATE/TIME	CHLORIDES	CALCIUM	MBT	SALT PPM													
9.7	38	4.0	1/32	7.0	0.50	3.0	12	16	8/12	6740	8/ 7/04 5:00pm	126,000	42000															
BIT DATA																												
BIT NO.	SIZE	MFG.	TYPE	IADC CODE	SERIAL NO.	JETS (1/32nd) or TFA	IN	OUT	FOOTAGE	HOURS	ROP	MTR	RPM RT+MTR	WOB	T	B	G											
7R	6-1/4"	SDBS	SEB709	617Y	10556908	13 13 13	5665	5786	14	1.00	14.0	Y	50/130	20														
11	6-1/4"	SDBS	SEB709	617Y	10553274	13 13 13	5786	6280	494	49.10	10.1	Y	50/130	20														
12	6-1/4"	SDBS	SEB709	617Y	10556911	13 13 13	6280	6750	470	33.10	14.0	Y	25/125	8-10														
HYDRAULICS																												
PUMP NO.	MANUFACTURER	LINER	STROKE LENGTH	GAL / STK	SPM	GPM	AV DP	AV DC	PUMP PRESS.	MTR DIFF PRESS.	HHP / IN ²	ECD	1 28 spm	2 40spm														
1	Wilson 600	5"	14	3.8		0							5950'	350														
2	Wilson 600	5"	14	3.8		0							5950'		600													
Both																												
DRILL STRING										GEOLOGIC							GENERAL INFO											
BOTTOMHOLE ASSEMBLY				LENGTH	O.D.	I.D.	FORMATION	MD	TVD	LITHOLOGY							RIG INFO											
6-1/4 Bit				1.00	6.250													Rig No: (435) 979-4644										
bit sub - float				1.98	4.625													Cell No. Steve (918) 629-9801										
							GAS DATA										Last BOP Test 7/20											
							BOTTOMS UP TIME BG GAS CONN GAS TRIP GAS										Next BOP Test 8/20											
							35										Last Safety Meeting 8/17											
							SHOWS TO ROP (FT/Hr)										Last BOP Drill 8/14											
20 jts - spiral HWDP				615.22	4.750	2.125											Last Operate Pipe Rams 8/14											
Griffith Dril jars				29.97	5.750												Last Operate Blind Ram 8/17											
6 jts - spiral HWDP				185.51	6.750	2.125											Last Operate Annular 8/4											
Total BHA:				833.68																								
STRING WT.	BHA WT.	PU WT.	SO WT.	ROT TORQUE	GRD ELEVATION	GL TO KB	KB ELEVATION	INTERMEDIATE CSG				LAST CASING		NEXT CASING														
80	22	140	65		5,835	12	5,847	7" @ 5435				7" @ 5435		4-1/2" @ 6750														
SURVEYS																												
MD	INCL	AZIMUTH	TVD	SECTION	N + S-	E + W-	DLS	TOOL	MD	INCL	AZIMUTH	TVD	SECTION	N + S-	E + W-	DLS	TOOL											
6,576	4.70	288.70	6551				0.94	mwd	6,710	5.70	280.40	6684				0.87	mwd											
6,672	5.40	281.80	6647				0.96	mwd									mwd											
DAILY ACTIVITY																												
FROM	TO	HRS	LAST 24 HOURS																									
6:00	8:30	2.50	TIH with bit to 6750'																									
8:30	11:00	2.50	Circulate trip gas																									
11:00	8:00	9.00	RU laydown machine, LDDP, HWDP & tools, break kelly - CASING POINT @ 8:00pm 8/21/04																									
8:00	3:00	7.00	RU & run 159 total jts of 4-1/2" 11.6ppf N80 LTC 8rd new Koeppel sealless casing incl 5 marker jts - 13 centralizers Detail: FS(1.25), SJ (41.78), FC (.8), 158 jts (6629.23) incl 5 marker jts with tops @ 6186, 595																									

Engineering & Supervision										EXACT Engineering, Inc.										(918) 599-9400									
Operator: Wolverine G&O Co of Utah, LLC										DAILY DRILLING REPORT										API# 43-041-30031									
DATE 08/23/04		WELL Wolverine Federal 17-2				CONTRACTOR CDDT Rig#10				COUNTY, STATE Sevier, UT				SPUD DATE 07/02/04		AFE		SUPERVISOR Steve Hash											
52		PRESENT OPERATIONS RDRT				TOTAL DEPTH PBTD 6624'				PROGRESS				DRILLING TIME		ROP #DIV/0!		FORMATION Sand		AUTH. DEPTH 6,650									

MUD DATA															
WT	VIS	WL	CK	PH	SAND	SOLIDS %	PV	YP	GELS	DEPTH	DATE/TIME	CHLORIDES	CALCIUM	MBT	SALT PPM
9.7	38	4.0	1/32	7.0	0.50	3.0	12	16	8/12	67.30	8/17/04 5:00pm	126,000	42000		

BIT DATA																			
BIT NO	SIZE	MFG	TYPE	IADC CODE	SERIAL NO.	JETS (1/32nd" or TFA)			IN	OUT	FOOTAGE	HOLS	ROP	MTR	RPM RT+MTR	WOB	DULL CONDITION		
																	T	B	G
7R	6-1/4"	SDBS	SEB709	617Y	10556908	13	13	13	5665	5786	14	1.00	14.0	Y	50/130	20			
11	6-1/4"	SDBS	SEB709	617Y	10553274	13	13	13	5786	6280	494	49.30	10.1	Y	50/130	20			
12	6-1/4"	SDBS	SEB709	617Y	10556911	13	13	13	6280	6750	470	33.30	14.0	Y	25/125	8-10			

HYDRAULICS															SLOW PUMP				
PUMP NO	MANUFACTURER	LINER	STROKE LENGTH	GAL / STK	SPM	GPM	AV DP	AV DC	PUMP PRESS	MTR DIFF PRESS	HHP IN ²	ECD	1		2				
													28 spm		40spm				
1	Wilson 600	5"	14	3.8		0							5950'		350				
2	Wilson 600	5"	14	3.8		0							5950'			600			
Both																			

DRILL STRING					GEOLOGIC					GENERAL INFO					
BOTTOMHOLE ASSEMBLY	LENGTH	O.D.	I.D.		FORMATION	MD	TVD			LITHOLOGY				RIG INFO	
														Rig No: (435) 979-4644	
														Cell No. Steve (918) 629-9801	
														Last BOP Test 7/20	
														Next BOP Test 8/20	
														Last Safety Meeting 8/17	
														Last BOP Drill 8/14	
														Last Operate Pipe Rams 8/14	
														Last Operate Blind Rams 8/17	
														Last Operate Annular 8/4	
Total BHA: 0.00															
STRING WT	BHA WT	PU WT	SO WT	ROT. TORQUE	GRD. ELEVATION	GL TO KB	KB ELEVATION			INTERMEDIATE CSG				LAST CASING	NEXT CASING
					5,835	12	5,847			7" @ 5435				4-1/2" @ 6668	

SURVEYS															
MD	INCL	AZMUTH	TVD	SECTION	N+ / S-	E+ / W-	DLS	TOOL	MD	INCL	AZMUTH		TVD	SECTION	N+ / S-
6,576	4.70	288.70	6551				0.94	mwd	6,710	5.70	280.40		6634		
6,672	5.40	281.80	6647				0.96	mwd							

DAILY ACTIVITY														
FROM	TO	HRS	LAST 24 HOURS											
6:00	7:30	1.50	RD Halco, set 11" x 4-1/2" C-22 casing slips thru bore of BOP, land casing with hanging wt of 60k											
7:30	6:00	22.50	ND BOPE, rough cut 4-1/2" & laydown cutoff with cmt head. Remove stack, install cap flange on wellhead											
			pressure wash oil mud from premix pit, rig pits, trip tank & choke skid. ND gas buster, choke & panic lines											
			Set out 3-1/2" rental kelly, rotating head & other rental items. Pressure wash derrick, floor & sub											
			Release Rig @ 6am 8/23/04											
			RDMORT											
			FINAL DRILLING REPORT - EXPECT COMPLETION IN 2-3 WEEKS											
			Thanks for the work!											
			Steve Hash, EXACT Engineering Inc., (918) 599-9400											
			Note: Production casing, casing crews, cement and remaining rig time will be included with Completion Costs											
Daily Total		24.00												

COST DATA														
------------------	--	--	--	--	--	--	--	--	--	--	--	--	--	--

016

EXACT Engineering, Inc.

www.exactengineering.com

415 S. Boston Ave., Suite 734, Tulsa, OK 74103 • (918) 599-9400 • (918) 599-9401 (fax)

Steven R. Hash, P.E.
Registered Professional Engineer
stevehash@exactengineering.com

CONFIDENTIAL PLEASE!

December 18, 2004

Mr. Dustin Doucet
Utah Division of Oil, Gas & Mining
1594 West North Temple, Suite 1210
Salt Lake City, UT 84114-5801

Re: Wolverine Federal 17-2 well
Sec 17 T23S R01W
Sevier Co., UT
API# 43-041-30031

Dear Mr. Doucet,

On behalf of Wolverine Gas and Oil Company of Utah, LLC, please find attached daily reports for the period August 24, 2004 through December 2, 2004 reflecting the well's completion and first production in November 2004. This concludes our daily reporting of operations as the well is now in production mode and the required production reporting will be done by Wolverine's Michigan office

Also enclosed is one copy of BLM form 3160-4 Well Completion Report & Log, recently filed with the Bureau of Land Management. Well logs will be submitted under separate cover by Wolverine's Grand Rapids, Michigan office. If alternate UDOGM reports are preferred please contact us and we will submit those that are requested. Enclosed also is a copy of our BLM sundry notice giving 5th business day notice of the well's production. Please maintain all of the enclosed information CONFIDENTIAL.

As always, please contact either Wolverine or me if there are further questions.

Very Truly Yours,

Steven R. Hash
Agent for Wolverine Gas and Oil Company of Utah, LLC

RECEIVED

DEC 2 / 2004

DIV. OF OIL, GAS & MINING

copy with enclosures via email to:
Wolverine Gas & Oil Co of Utah, LLC: Richard Moritz, Sue Benson
EXACT Engineering, Inc. well file

Petroleum Engineering Consulting, Personnel & Jobsite Supervision
complete well design, construction & management, drilling, completion, production, pipelines, appraisals,
due diligence, acquisitions, procedures, temporary personnel and field supervision

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB No. 1004-0137
Expires: March 31, 2007

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

SUBMIT IN TRIPLICATE- Other instructions on reverse side.

1. Type of Well
☒ Oil Well ☐ Gas Well ☐ Other

2. Name of Operator **Wolverine Gas & Oil Co of Utah, LLC**

3a. Address **One Riverfront Plaza, 55 Campau NW, Grand Rapids, MI** 3b. Phone No. (include area code) **616-458-1150**

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
830' FSL & 1910' FWL, Section 17, T23S, R1W

5. Lease Serial No.
UTU-73528

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.
Wolverine Fed Exploration Unit

8. Well Name and No.
Wolverine Federal #17-2

9. API Well No.
4304130031

10. Field and Pool, or Exploratory Area
Covenant Field

11. County or Parish, State
Sevier Co, UT

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
<input type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input checked="" type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input checked="" type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input type="checkbox"/> Other 5th business day
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	notice
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface location; and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

Please be informed that first oil production into permanent stock tanks occurred on Nov 23, 2004 from the Wolverine Federal #17-2 well. The separation, treating and storage tank facility for the subject well is located offsite, approximately 1/2 mile due north, adjacent to and in conjunction with the Kings Meadow Ranches #17-1 discovery well. Likewise, FIRST OIL SALES occurred on Nov 23, 2004.

PLEASE MAINTAIN ALL INFORMATION CONTAINED HEREIN CONFIDENTIAL - thank you

14. I hereby certify that the foregoing is true and correct
Name (Printed/Typed)

Steven R Hash - EXACT Engineering (918-599-9400)

Title **Consulting Engineer for Wolverine Gas & Oil Co of Utah, LLC**

Signature

Steven R. Hash

Date

12/18/2004

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Title

Date

Office

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on page 2)

Daily Completion Report

Wolverine Gas & Oil Company of Utah, LLC
Wolverine Federal #17-2 well
SE SW Sec 17 T23S - R01W
Sevier Co., Utah

page 8 of 8

New Completion
4-1/2" 11.6# N80 @ 6698' PBD
PETD 6698' on 10/23/04
Perfs 6378 - 6388 on 10/23/04
Perfs 6310- 6334' on 10/28/04
ESP set @ 5030'
GL. to RKB: 12'

"TIGHT HOLE"

- 12/01/04 Well pumping (electric submersible on generator)
Pumped 136 BO, 1 BW in 7 hrs
PTP 90 psig, 18/64" chk, FCP 50 psig, ESP speed 55hz, arnps 32.5
Flowline psi @ wellhead 50 psig, @ treater inlet 80 psig, treater 30 psig, 140° F, running on propane; gas TSTM
Casing Fluid Level by Echometer:
Comment: Hard freeze, 10 degr below zero, lost approx 200 BO in tank pad overnight due to frozen oil dump line in btm of stock tank, hi-level shut down failed, fluid escaped thru treater vent line, all oil contained in diked treater pad, down 17 hrs.
Total oil produced this month 2963 BO (thru battery)
Total water produced this month 21 BW (thru battery)
Total oil sales past 24 hrs 841 BO + zero bbls test oil = 841 BO
Total oil sales this month 2718 BO + 1107 bbls test oil = 3825 BO
Cumulative oil production this completion 4070 (production thru battery + test oil sales only)
CMOL S. Hash
- 12/02/04 Well pumping (electric submersible on generator) This report eff. 2pm 12/1/04 – Last report for month
Pumped 44 BO, 0 BW in 2 hrs
PTP 90 psig, 18/64" chk, SICP 320 psig, ESP speed 55-69hz
Flowline psi @ wellhead 50-100 psig, @ treater inlet 80-140 psig, treater 30 psig, 140° F, running on propane; gas TSTM
Casing Fluid Level by Echometer:
Comment: Returned well to production, sub-zero cold.
Total oil produced this month 3007 BO (thru battery)
Total water produced this month 21 BW (thru battery)
Total oil sales past 24 hrs 0 BO + zero bbls test oil = 0 BO
Total oil sales this month 2718 BO + 1107 bbls test oil = 3825 BO
Cumulative oil production this completion 4114 (production thru battery + test oil sales only)
CMOL S. Hash

FINAL REPORT THIS COMPLETION – TRANSFERRED TO DAILY PRODUCTION REPORT

Daily Completion Report

Wolverine Gas & Oil Company of Utah, LLC
Wolverine Federal #17-2 well
SE SW Sec 17 T23S - R01W
Sevier Co., Utah

page 7 of 8

New Completion
4-1/2" 11.6# N80 @ 6698' PBD
PETD 6698' on 10/23/04
Perfs 6378 - 6388 on 10/23/04
Perfs 6310- 6334' on 10/28/04
ESP set @ 5030'
GL. to RKB: 12'

"TIGHT HOLE"

PTP 100 psig, 18/64" chk, SICP 220 psig, ESP speed 55 hz, amps 31.4
Flowline psi @ wellhead 30 psig (new gauge), @ treater inlet 58 psig, treater 28 psig, 129° F, running on propane; gas TSTM
Casing Fluid Level by Echometer: 4611' ??
Comment: Increased pump speed from 50hz to 55hz, no incr in PTP, monitoring fluid level
Total oil produced this month 1705 BO (thru battery)
Total water produced this month 7 BW (thru battery)
Total oil sales past 24 hrs 563 BO + zero bbls test oil = 563 BO
Total oil sales this month 1302 BO + 813 bbls test oil = 2115 BO
Cumulative oil production this completion 2518 BO (production thru battery + test oil sales only)
CMOL S. Hash

11/29/04 Well pumping (electric submersible on generator)
Pumped 513 BO, 9 BW in 24 hrs, target rate = 500 bopd
PTP 100 psig, 18/64" chk, FCP 60 psig, ESP speed 58 hz, amps 32.5
Flowline psi @ wellhead 60 psig, @ treater inlet 54 psig, treater 30 psig, 128° F, running on propane; gas TSTM
Casing Fluid Level by Echometer: 1142' (good shot by turning off ESP & gen set)
Comment: Cannot incr pump output, incr pmp speed fr 55 to 60hz, no incr in PTP or flowrate, opnd csg to flowline 225 to 60 in 1 min, flwg at 60 psig; reversed ESP rotation – no success, suspect pump deficiency, will continue to troubleshoot.
Total oil produced this month 2218 BO (thru battery)
Total water produced this month 16 BW (thru battery)
Total oil sales past 24 hrs 288 BO + 294 bbls test oil = 582 BO
Total oil sales this month 1590 BO + 1107 bbls test oil = 2697 BO
Cumulative oil production this completion 3325 BO (production thru battery + test oil sales only)
CMOL S. Hash

11/30/04 Well pumping (electric submersible on generator)
Pumped 609 BO, 4 BW in 24 hrs
PTP 120 psig, 18/64" chk, FCP 60 psig, ESP speed 58 hz, amps 32.5
Flowline psi @ wellhead 36 psig, @ treater inlet 55 psig, treater 29 psig, 122° F, running on propane; gas TSTM
Casing Fluid Level by Echometer:
Comment:
Total oil produced this month 2827 BO (thru battery)
Total water produced this month 20 BW (thru battery)
Total oil sales past 24 hrs 287 BO + zero bbls test oil = 287 BO
Total oil sales this month 1877 BO + 1107 bbls test oil = 2984 BO
Cumulative oil production this completion 3934 (production thru battery + test oil sales only)
CMOL S. Hash

EXACT Engineering, Inc. 415 S. Boston, Suite 714, Tulsa, OK 74103 (918) 599-9400

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Complete well design, construction & management, drilling, completion, production, pipelines, evaluations,
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Daily Completion Report

Wolverine Gas & Oil Company of Utah, LLC

Wolverine Federal #17-2 well

SE SW Sec 17 T2S3 - R01W

Sevier Co., Utah

page 6 of 8

New Completion

4-1/2" 11.6# N80 @ 6698' PBD

PBD 6698' on 10/23/04

Perfs 6378 - 6388 on 10/23/04

Perfs 6310- 6334' on 10/28/04

ESP set @ 5030'

GL to RKB: 12'

"TIGHT HOLE"

gas TSTM

Casing Fluid Level by Echometer: NA.

Comment: continued to adjust well & treater pressures, water level coming up gradually in treater, not dumping yet. FIRST OIL SALES to Summit Energy / on Nov 23, 2004 via GIANT Trkg, sold 265 bbls test oil out of frac tank on location

CMOL S. Hash

- 11/26/04 Well pumping (electric submersible on generator)
Pumped 148 BO, 0 BW in 8 hrs from 6am to 2pm, short gauge period to get on 2pm daily gauge cycle. Target rate = 500 bopd
PTP 200 psig, SICP 220 psig, 16/64" chk, ESP speed 50 hz, amps 29.3
Flowline psi @ wellhead 70 psig, @ treater inlet 69 psig, treater 28 psig, 130° F, running on propane; gas TSTM
Casing Fluid Level by Echometer: 290' fs.
Comment: continued to adjust well & treater pressures, water level coming up gradually in treater, not dumping yet. Sold 270 bbls test oil out of frac tank on location to Summit Energy via GIANT Trkg. ~ 1000 bbls test oil remains to be sold.
Total oil produced this month 734 BO (thru battery)
Total water produced this month 0 BW (thru battery)
Total oil sales past 24 hrs 462 BO + 270 bbls test oil = 732 BO
Total oil sales this month 462 BO + 535 bbls test oil = 997 BO
Cumulative oil production this completion 1269 BO (production thru battery + test oil sales only)
CMOL S. Hash
- 11/27/04 Well pumping (electric submersible on generator)
Pumped 476 BO, 0 BW in 24 hrs from 2pm to 2pm, target rate = 500 bopd
PTP 100 psig, 18/64" chk, SICP 220 psig, ESP speed 50 hz, amps 29.2
Flowline psi @ wellhead 70 psig, @ treater inlet 68 psig, treater 28 psig, 128° F, running on propane; gas TSTM
Casing Fluid Level by Echometer: na
Comment: water level coming up gradually in treater, opened valve to water tank at end of day.
Sold 278 bbls test oil out of frac tanks on location to Summit Energy via GIANT Trkg. ~ 750 bbls test oil remains to be sold.
Total oil produced this month 1210 BO (thru battery)
Total water produced this month 0 BW (thru battery)
Total oil sales past 24 hrs 277 BO + 278 bbls test oil = 555 BO
Total oil sales this month 739 BO + 813 bbls test oil = 1552 BO
Cumulative oil production this completion 2023 BO (production thru battery + test oil sales only)
CMOL S. Hash

- 11/28/04 Well pumping (electric submersible on generator)
Pumped 495 BO, 7 BW in 24 hrs, target rate = 500 bopd
EXACT Engineering, Inc. 415 S. Boston, Suite 734, Tulsa, OK 74103 (918) 599-9400

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Daily Completion Report

Wolverine Gas & Oil Company of Utah, LLC
Wolverine Federal #17-2 well
SE SW Sec 17 T23S - R01W
Sevier Co., Utah

page 5 of 8

New Completion
4-1/2" 11.6# N80 @ 6698' PBTD
PBTD 6698' on 10/23/04
Perfs 6378 - 6388 on 10/23/04
Perfs 6310- 6334' on 10/28/04
ESP set @ 5030'
GL to RKB: 12'

"TIGHT HOLE"

- 11/17/04 SITP 415 psi
Move in B Jackson & Horizontal Directional Drilling, bore SH 24 & pull thru 202' of 3-1/2" .30" wall sch 80, Gr B, ERW line pipe, w/ 12 mil fusion bond epoxy coating plus 25 mil "powercrete" overcoating from Shawcor Coaters in SLC. Move bore machine to Peterson Creek, SDFN. Prep to begin screwing 2-7/8" tbg flowline tomorrow.
- 11/18/04 SITP 415 psi
Shut-in waiting on pipeline
Completed bore of Peterson Creek and pulled thru 203' of 3-1/2" .30" wall sch 80, Gr B, ERW line pipe (same as above). String and screw together 2-7/8" 6.5ppf J55 tbg as temporary flowline from SH 24 to Peterson Creek and from Peterson Creek to CPF treater facility. Will plumb wellhead and lay the well to SH 24 portion and make tie-ins on Friday 11/19, then hydrotest Sat 11/20. Presently completing heater-treater plumbing at CPF treater site at pad "A" near KMR 17-1. 18,000 gal skid mounted propane cylinder scheduled for delivery on Fri 11/19. ECI to complete basic level of shutdown & callout notification instrumentation on Thu 11/18.
- 11/19/04 SITP 415 psi
Shut-in waiting on pipeline
Will make tie-ins today & hydrotest flowline Sat, instrumentation in progress, completing main discharge valve set for treater facility, running fuel, sales and air lines today. Propane cylinder delayed. Working to turn #17-2 on thru treater facility this weekend
- 11/20/04 SITP 415 psi
thru Shut-in waiting on treater facility
- 11/22/04 Tie-in flowline at crossings, hydrotest to 750 psi for 8 hrs, oil & water lines completed to discharge valve set & into temp battery, set 18,000 gal propane cylinder & laid fuel line to 17-2 treater, dressed out treater & tied in flowline, built combination hookup at 17-2 wellhead. Need gas vent & air lines, expect to fire 17-2 treater mid day Monday, 11/22.
- 11/23/04 SITP 415 psi
Continued to finalize treater hookup, laid 1" poly air supply lines and set (2) 4cfm air compressors at 17-2 & treater facility for control air, fired treater, warmed to 110 deg, began pumping test oil from frac tanks on 17-2 thru flowline to treater facility, filled treater, water dump float not operating properly, SDFN.
- 11/24/04 Emptied 120 bbl fluid from treater, removed float trunion, exchanged float parts with 17-1 treater, replaced trunion, loaded vessel, started 17-2 ESP @ 6pm, attempted to adjust wellhead hi-lo valve and treater inlet hi-lo valve with well pumping, unsuccessful, recv 187 bbl oil while adjusting well, SDFN @ 11pm.
- 11/25/04 Installed Kimray 2150 SMT backpressure valve before treater hi-lo to stabilize inlet flow, started pump @ 12:45pm and adjusted control valves on wellhead & flowline.
Well pumping (electric submersible on generator)
Pumped 312 BO, 0 BW in 17.25 hrs from 12:45pm to 6am. Target rate = 500 bopd
PTP 650 psig, SICP 220 psig, 10/64" chk, ESP speed 50 hz, amps 29.3
Flowline psi @ wellhead 70 psig, @ treater inlet 69 psig, treater 28 psig, 130° F, running on propane;
EXACT Engineering, Inc. 415 S. Boston, Suite 734, Tulsa, OK 74103 (918) 599-9400

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Daily Completion Report

Wolverine Gas & Oil Company of Utah, LLC
Wolverine Federal #17-2 well
SE SW Sec 17 T23S - R01W
Sevier Co., Utah

page 4 of 8

New Completion
4-1/2" 11.6# N80 @ 6698' PBTD
PBTD 6698' on 10/23/04
Perfs 6378 - 6388 on 10/23/04
Perfs 6310- 6334' on 10/28/04
ESP set @ 5030'
GL to RKB: 12'

"TIGHT HOLE"

RIH w/ 5000' #4 Flat SN 62C-2624BB

11/02/04
cont. Started ESP @ 2:30 PM. Turned through separator @ 4:00 PM. SI well @ 6:30 PM. Produced 144 bbl in 4 1/2 hrs (32 b/hr). Shot FL before SI. FL 195' from surface. PTP 60 psi. SICP 10 psi. SDFN. CMOL. S.Betts.
Est DCC \$ 79,691 Est CCC \$ 447,242 Complet on AFE \$ 515,450
Est DHC \$ 2,281,685 Est Total Well Cost to date \$ 2,728,927

11/03/04 SITP 415 psi, SICP 10 psi, (12 hrs) Started ESP @ 7am, pumped 12 hrs on test and recovered 461 bbl fluid, cannot determine water content, samples 100% oil, no gas vented. Attempted fluid shot @ 7pm - no reading - casing may be full. SWI @ 7pm, test concluded. Expect to lay temporary flowline next week - presently connecting oil treater @ treater facility. 1643 BO produced this completion. Daily cost incl 6x25 treater.
Est DCC \$ 28,155 Est CCC \$ 475,397 Completion AFE \$ 515,450
Est DHC \$ 2,281,685 Est Total Well Cost to date \$ 2,757,082

11/04/04 SITP 415 psi, SICP 410 psi (36 hrs) Well shut in waiting on treater facility
Est DCC \$ 860 Est CCC \$ 476,257 Completion AFE \$ 515,450
Est DHC \$ 2,281,685 Est Total Well Cost to date \$ 2,757,942

11/05/04 SITP 415 psi, SICP 410 psi (60 hrs)
COMPLETION DATE - Nov 1, 2004; FIRST OIL PRODUCTION date - Nov 1, 2004
Est DCC \$ 860 Est CCC \$ 477,117 Completion AFE \$ 515,450
Est DHC \$ 2,281,685 Est Total Well Cost to date \$ 2,758,802

11/06/04 SITP 415 psi
To Shut-in waiting on pipeline
11/10/04

11/11/04 SITP 415 psi
Shut-in waiting on pipeline
Strung 500' of 3-1/2" linepipe for SH 24 & Peterson Creek crossing

11/12/04 SITP 415 psi
Shut-in waiting on pipeline
Welded two sections for bores, Utah inspection x-rayed welds, coated joints, ready for B Jackson Construction to make both bores. Delayed move-in until Monday 11/15 due to wet weather
Expect temp pipeline to be complete by Friday 11/19/04

11/13/04 SITP 415 psi
To Shut-in waiting on pipeline
11/15/04

11/16/04 SITP 415 psi
B Jackson Construction to move in tomorrow

EXACT Engineering, Inc. 415 S. Boston, Suite 714, Tulsa, OK 74103 (918) 599-9400

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Daily Completion Report

Wolverine Gas & Oil Company of Utah, LLC

Wolverine Federal #17-2 well

SE SW Sec 17 T23S - R01W

Sevier Co., Utah

page 3 of 8

New Completion

4- 1/2" 11.6# N80 @ 6698' PBTD

PE.TD 6698' on 10/23/04

Perfs 6378 - 6388 on 10/23/04

Perfs 6310- 6334' on 10/28/04

ESP set @ 5030'

GL. to RKB: 12'

"TIGHT HOLE"

10/30/04 MIRU HALCO to tbg. Pump & test lines to 6000 psi. Pumped 5 bbl 4% KCL pad + 2500 gal 7 1/2% FEHCL + Moroflo III + HAI-404 + 150 Bioballs + 25 bb 4% KCL flush. AIR 4.3 bbl/min @ 3000 psi. ISDTP 933 psi, 1 1/2 minutes tbg on vacuum. 90 bbl load to recover. RD & released HALCO. RU swab tools. BFL @ surface. Made 4 swab run, recovered 59 BW in 1 hr. Well flowing. Flowed 28 BO in 1 hr. CK well to 20/64" & turned into separator. Flowed additional 127 BO in 5 hrs. SI. SITP 380 psi. 1 hr SITP 400 psi. SDFN. Total production both swab & flowed 155 BO, 59 BW. Est 1038 BO in frac tanks. CMOL S. Betts
Est DCC \$ 28,764 Est CCC \$ 346,421 Completion AFE \$ 515,450
Est DHC \$ 2,281,685 Est Total Well Cost to date \$ 2,628,106

10/31/04 14 hrs SITP 415 psi SICP 1000 psi. Killed tbg w/ 35 bbl 4% KCL. Released on/off tool, circulated hole w/ 120 bbl 4% KCL. Latched onto pkr, released & TOH. RIH w/ on/off half (w/o seals) & 201 1/2 jts tbg. Tagged sand, reversed circulated sand off pkr, latched onto, released, & TOH w/ pkr (lost 20 while circulating hole). Install 7 1/16" 3M x 6 3/8" tbg bowl hanger flange under BOP. SI. SDFN. 55 BLWTR. CMOL S. Betts
Est DCC \$ 7,061 Est CCC \$ 353,482 Completion AFE \$ 515,450
Est DHC \$ 2,281,685 Est Total Well Cost to date \$ 2,635,167

11/01/04 15 hrs SICP 0 psi. PU & RIH w/ Centrilift DC-750, series 338, w/ 258 stages ESP, 1 tbg check, 1 tbg drain, 1-6' 2 3/8" tbg sub, & 159 jts 2 3/8" tbg. Wait on Centrilift 9 hrs to deliver additional 1000' of cable (original spool contained 4000'). NDBOP. NU well head. Install generator, diesel fuel tank, set-up transformer, & ESP variable control panel. SI. SDFN. CMOL S. Betts
Est DCC \$ 10,723 Est CCC \$ 364,205 Completion AFE \$ 515,450
Est DHC \$ 2,281,685 Est Total Well Cost to date \$ 2,645,890

11/02/04 5hrs SITP 0 psi SICP 0 psi. Finished installation of electricity to well head. Started generator. Hertz cycle on generator not stable. Worked on generator & ESP control. RD & released WSU.

Tubing design as follows:

1-	3-1/8" OD 46 hp, 940 v, 37 amp DMF-1	15.35'	@ 5030
	Motor SN 21D-48777		
1-	3-1/8" OD gas separator/intake DPINT-1	5.40'	
	SN 321D-53689		
1-	3-3/4" OD DC 750 128 stage DPMT -1 pump	11.39'	
	SN 01D-68443		
1-	3-3/4" OD DC 750 128 stage DPMT -1 pump	11.79'	
	SN. 01D-68442		
1-	2-3/8" EUE 8rd 4.7# N-80 sub	6.05'	
1-	jt 2 3/8" EUE 8rd 4.7# N-80	31.56'	
1-	2-3/8" tbg check	.60'	@ 4935
2-	jts 2 3/8" EUE 8rd 4.7# N-80	62.82'	
1-	2 3/8" tbg drain	.40'	@ 4872
155-	jts 2 3/8" EUE 8rd 4.7# N-80	4,872.58'	
1-	2 3/8" EUE 8rd clp x 2 7/8" EUE 8rd pin XO	.29'	
	Over all	5,018.23'	
	Set RKB	12.00'	
	Btm set @	5,030.23'	

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Daily Completion Report

Wolverine Gas & Oil Company of Utah, LLC

Wolverine Federal #17-2 well

SE SW Sec 17 T23S - R01W

Sevier Co., Utah

page 2 of 8

New Completion

4-1/2" 11.6# N80 @ 6698' PBTD

PETD 6698' on 10/23/04

Perfs 6378 - 6388 on 10/23/04

Perfs 6310- 6334' on 10/28/04

ESP set @ 5030'

GL. to RKB: 12'

"TIGHT HOLE"

- 10/26/04 13hrs SITP 410#. Open to tk, flowed, .87 bbl. RU swab tools. BFL @ surface. Swabbed 30.6 bbl oil, in 5 runs in 1 1/2 hrs. SI. MIRU HALCO to tbq. Pump & test lines to 6000 psi. Test well head valves to 5000 psi. Pumped 10 bbl 4% KCL pad + 1000 gal 7 1/2% FEHCL + Moroflo III + HAI-404 + 60 Bioballs + 35 bbl 4% KCL flush. Formation broke @ 3800 psi. AIR 3.6 bbl/min @ 3400 psi. ISDTP 950 psi, 2 minutes tbq on vacuum. 70 bbl load to recover. RD & released HALCO. RU swab tools. BFL 300' from surface. Swabbed 59 BLV/ + 103 BO in 18 runs in 4 1/2 hrs. Well flowing.
5:00 PM CK 14/64", FTP 125 psi. 5:00 AM 12 hrs production, CK 14/64", FTP 85 psi, 213 BO. Open CK to 20/64". Est 409 BO in frac tanks. CMOL: S. Betts
Est DCC \$ 20,487 Est CCC \$ 283,956 Completion AFE \$ 515,450
Est DHC \$ 2,281,685 Est Total Well Cost to date \$ 2,565,641
- 10/27/04 9:00 AM 4 hrs production, Ck 20/64", FTP 30 psi, 82 E.O. SI well for build up. ISITP 380 psi. 5 minutes SITP 410 psi, 10 minutes SITP 410 psi. Ground out last sample 1% water cut. SDFN. Est 492 BO in frac tanks. This AM 20 1/2 hrs SITP 415 psi. CMOL S. Betts
Est DCC \$ 4,486 Est CCC \$ 288,442 Completion AFE \$ 515,450
Est DHC \$ 2,281,685 Est Total Well Cost to date \$ 2,570,127
- 10/28/04 22 hrs SITP 415 psi. MIRU Tefteller. RIH w/ Pressure recording bombs, making gradients stops on the way in. POH w/ bomb. BHT 188°. BHP 2632 psi. RIH & obtained two (2) fluid samples from perfs to be analyzed. POH w/ sample catcher. Flushed tbq w/ 25 bbl 4% KCL. RIH & installed 1.875" "XX" Blanking plug in profile nipple. PT blanking plug to 1000 psi. Held. RD & released SLU. Bleed pressure off tbq & csg. Released on/off tool half off profile nipple & POH w/ 11 jts. Circulated 1sx sand on top of RBP w/ 20 bbl 4% KCL. POH w/ tbq to 4700'. RU swab tools. Swabbed 20 bbl in 1 hr. Finished TOH w/ tbq & on/off tool half. SI. SDFN. CMOL: S. Betts
Est DCC \$ 10,740 Est CCC \$ 299,182 Completion AFE \$ 515,450
Est DHC \$ 2,281,685 Est Total Well Cost to date \$ 2,580,867
- 10/29/04 14 hrs SICP 0 psi. MIRU WellServ WLU. Perforate thru casing under lubricator the Lower Navajo 1 interval 6310-6334 (24') with 4 jpf (96 holes) per density-neutron log dated 18-Aug-2004, using 3-1/8" slick gun, Titan 22.7 gm charges for .42" hole dia n and 38.39" penetration, POOH. FL before perf 1980' from surface, after perf 1850' from surface (130' entry). Set a 4-1/2" x 2-3/8" Arrow AS1X retrievable csg pkr on wireline (1.875" min id) with on/off half (1.87 "X" profile) and glass disk in place w/ top @ 6247' & btm @ 6263' kb, POOH. FL after setting pkr 250' from surface (1730' total entry [1980-250-]). TIH w/ on/off half on 198 jts tbq & 2 tbq subs (1-8' & 1-10'), latch, pull test, land in BOP with 20k comp on pkr. Screw tree on top of tbq, load csg, close rams & PT csg & pkr to 1000 psi, hold. RU WL & TIH w/ sinker bars (1-11/16' max od). FL @ surface, break disk, no chg in fluid level, POOH, RDWL. RU swab tools. IFL @ surface. Swabbed 17 BO, 20 BW, in 4 runs in 1 hr. Well kicked off & flowed 28 bbls in 70 minutes. Turned into separator, CK 20/64" FTP 30 psi. 5:00 PM - 6:00 AM, 13 hrs, CK 20/64, FTP 35#, 317 BO. Total swabbed & flowed for day, 362 BO, 20BW. Separator did not vent any gas by-passed separator @ 10:00 PM. CMOL S. Betts
Est DCC \$ 18,474 Est CCC \$ 317,656 Completion AFE \$ 515,450
Est DHC \$ 2,281,685 Est Total Well Cost to date \$ 2,599,341

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Daily Completion Report

page 1 of 8

Wolverine Gas & Oil Company of Utah, LLC

Wolverine Federal #17-2 well

SE SW Sec 17 T23S - R01W

Sevier Co., Utah

New Completion

4-1/2" 11.6# N80 @ 6698' PBTD

PBTD 6698' on 10/23/04

Perfs 6378 - 6388 on 10/23/04

Perfs 6310- 6334' on 10/28/04

ESP set @ 5030'

GL to RKB: 12'

"TIGHT HOLE"

- 10/21/04 **FIRST COMPLETION REPORT** – during October cleaned location, removed mud soaked dirt to nearby landfill, replaced with dry material, roadbase & 1-1/2" minus rock chip material. Fenced 4th side of reserve pit per BLM. Waiting on completion rig while obtaining pipeline ROW permits & building treater facility at 17-1 location (Pad A). Set 11"-3m x 7-1/16"-5m tbg head "B" section with 7-1/16" 5m single master tree & 2-1/16" single wing valve. Offload 215 jts of 2-3/8" 4.7ppf N80 EUE 8rd new tbg. Hookup manifold & flowline to test equipment & (4) 500 bbl frac tanks.
- 10/22/04 MIRU Pool Well Service DD WSU #824. Todd Farley Tool Pusher. Set open top 100 bbl tank and Triplex pump. SDFN. CMOL: R Klein
Est DCC \$ 37,895 Est CCC \$ 210,571 Completion AFE \$ 515,450
Est DHC \$ 2,281,685 Est Total Well Cost to date \$ 2,492,256
- 10/23/04 Held safety meeting w/ crew and went over job procedure. NU WF 7-1/16 5m hydraulic BOP (2-3/8" rams on top; CSO ram on the bottom). Pressure test csg and lines to 3000 psi f/ 10 min. OK. Test FT flow line to 500 psi. OK. PU 3-7/8" od tri-cone bit, 4-1/2" 11.6# csg scraper, bit sub xo, 2-3/8" standard SN w/ 1-25/32" ID and RIH w/ 2-3/8" 4.7#/ft N-80 EUE TBG. Rabbit each joint while TIH. Tag PBTD @ 6698' w/ 212 jts + 19' of jt 213, LD last jt left 212 jts in hole @ 6679'. RU HALCO to csg. Held safety meeting re pump job. Test pump and lines to 3000 psi, OK. Pump tbg cleanup and displacement as follows: 15 bbls caustic acid, 12 bbls of chemical wash, 24 bbls of 8% KCL flush, 7 bbls of 7-1/2% HCL acid, & 12 bbls of flush all @ 3 BPM, increased rate to 5 BPM and finished pumping 104 bbls of flush. Pumped a total of 202 bbls @ an avg rate of 5 BPM @ 1700 psi. Secure well, RD HALCO and SDFN. CMOL: R Klein
Est DCC \$ 24,003 Est CCC \$ 234,574 Completion AFE \$ 515,450
Est DHC \$ 2,281,685 Est Total Well Cost to date \$ 2,516,259
- 10/24/04 RU swab, swabbed 20 blw & lowered fluid level in csg to 2000' fs. Rig for tbg, LD 11 jts & POOH w/ tbg & LD tools. RU WellServ WLU & run CBL-VDL-CCL log from PBTD 6684' to 4410' in 4-1/2" csg. TOC @ 5610' (planned TOC 5200'). Ran GR-JB to 6400'. Perforate thru casing under lubricator the Lower Navajo 1 interval 6378-6388 (10') with 4 jpf (40 holes) per density-neutron log dated 18-Aug-2004, using 3-1/8" slick gun, Titan 23 gm charges for .41" hole diam and 35" penetration, POOH. Set a 4-1/2" x 2-3/8" Arrow AS1X retrievable csg pkr on wireline (1.875" min id) with on/off half (1.87 "X" profile) and glass disk in place w/ top @ 6356' & btm @ 6372' kb, POOH. TIH w/ on/off half on 202 jts tbg, latch, pull test, land in BOP with 15k comp on pkr. Screw tree on top of tbg, load csg, close rams & PT csg & pkr to 1100 psi, hold. RU WL & TIH w/ sinker bars & CCL (1-11/16" max od). FL 2100' fs, break disk, no chg in fluid level, POOH, RDWL, SWI&SDFN @ 9:30pm CMOL: R Klein
Est DCC \$ 22,887 Est CCC \$ 257,461 Completion AFE \$ 515,450
Est DHC \$ 2,281,685 Est Total Well Cost to date \$ 2,539,146
- 10/25/04 9hr SITP zero, SICP 1100 psi. Open well, slight blow, BFL surface. Swabbed 20 blw & 64 bbl new oil in 8 hrs swabbing, EFL 5500' fs, last hr 2.5 bph, 100% oil cut, no visible water, crude oil appears identical to Navajo in KMR 17-1. SWI&SDFN @ 5:45pm. This am 13hr SITP 410psi CMOL: S Hash
Est DCC \$ 6,008 Est CCC \$ 263,469 Completion AFE \$ 515,450
Est DHC \$ 2,281,685 Est Total Well Cost to date \$ 2,545,154

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Wolverine Gas & Oil Company of Utah, LLC
Wolverine Federal #17-2 well
SE SW Sec 17 T23S - R01W
Sevier Co., Utah

NO reports August 24 thru Oct 20, 2004
Waiting on completion rig

[illegible]



WOLVERINE GAS AND OIL CORPORATION

Energy Exploration in Partnership with the Environment

December 28, 2004

Dustin Doucet
Petroleum Engineer
Utah Division of Oil, Gas and Mining
1594 West North Temple, Suite 1210
PO Box 145801
Salt Lake City, UT 84114

Re: KMR 17-2 Well

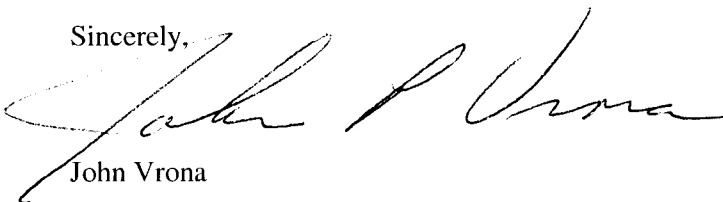
Dear Dustin:

Enclosed, please find the following data for the above referenced well:

- One signed State of Utah Well Completion or Recompletion Report and Log
- One hard copy Core Descriptions Report
- One hard copy Fullwave Sonic Delta- T Plot
- One hard copy Wave Sonic Delta-T Log
- One hard copy EMI
- One hard copy Spectral Density Dual Space Neutron
- One hard copy Microlog
- One hard copy Dual Laterolog/MSFL
- One hard copy Mud Log
- CD containing additional well data

Please keep this report and all attachments confidential for as long as allowed under state guidelines. If you have any questions or concerns, please feel free to contact me.

Sincerely,



John Vrona

JV/hb
Enclosures

cc: 17-2 Well Log file

DEC 30 2004

017

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

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AMENDED REPORT ☐ FORM 8
(highlight changes)

WELL COMPLETION OR RECOMPLETION REPORT AND LOG									
1a. TYPE OF WELL: OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> DRY <input type="checkbox"/> OTHER <input type="checkbox"/>									
b. TYPE OF WORK: NEW WELL <input checked="" type="checkbox"/> HORIZ. LATS. <input type="checkbox"/> DEEP-EN <input type="checkbox"/> RE-ENTRY <input type="checkbox"/> DIFF. RESVR. <input type="checkbox"/> OTHER <input type="checkbox"/>									
2. NAME OF OPERATOR: Wolverine Gas and Oil Company of Utah, LLC									
3. ADDRESS OF OPERATOR: 55 Campau NW CITY Grand Rapids STATE MI ZIP 49503					PHONE NUMBER: (616) 458-1150				
4. LOCATION OF WELL (FOOTAGES) 1910 AT SURFACE: 830' FSL & 1901' FWL Sec 17 AT TOP PRODUCING INTERVAL REPORTED BELOW: 810' FSL & 1780' FWL Sec 17 AT TOTAL DEPTH: 841' FSL & 1741' FWL Sec 17									
5. LEASE DESIGNATION AND SERIAL NUMBER: UTU-73528									
6. IF INDIAN, ALLOTTEE OR TRIBE NAME: N/A									
7. UNIT or CA AGREEMENT NAME: Wolverine Fed Expl Unit									
8. WELL NAME and NUMBER: Wolverine Federal #17-2									
9. API NUMBER: 4304130031									
10. FIELD AND POOL, OR WILDCAT: Covenant Field									
11. QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: NESW 17 23S 01W 26									
12. COUNTY: Sevier					13. STATE: UTAH				
14. DATE SPUDDED: 7/2/2004		15. DATE T.D. REACHED: 8/16/2004		16. DATE COMPLETED: 11/1/2004		ABANDONED <input type="checkbox"/> READY TO PRODUCE <input checked="" type="checkbox"/>		17. ELEVATIONS (DF, RKB, RT, GL): GL 5835; DF 5846; KB 5847	
18. TOTAL DEPTH: MD 6,750 TVD 6,724		19. PLUG BACK T.D.: MD 6,698 TVD 6,672		20. IF MULTIPLE COMPLETIONS, HOW MANY? *		21. DEPTH BRIDGE: MD PLUG SET: TVD			
22. TYPE ELECTRIC AND OTHER MECHANICAL LOGS RUN (Submit copy of each): Density Neutron; Dual Laterolog/MSFL; Microlog; EMI; Sonic; MILL LOG						23. VIA WELL CORED? NO <input type="checkbox"/> YES <input checked="" type="checkbox"/> (Submit analysis) VIA DST RUN? NO <input type="checkbox"/> YES <input checked="" type="checkbox"/> (Submit report) DIRECTIONAL SURVEY? NO <input type="checkbox"/> YES <input checked="" type="checkbox"/> (Submit copy)			
24. CASING AND LINER RECORD (Report all strings set in well)									
HOLE SIZE	SIZE/GRADE	WEIGHT (#/ft.)	TOP (MD)	BOTTOM (MD)	STAGE CEMENT DEPT	CEMENT TYPE & NO. OF SACKS	SLURRY VOLUME (BBL)	CEMENT TOP **	AMOUNT PULLED
18.00"	14"	---	12	92		G 250	37	surface	zero
12.25"	9.63" J55	36	12	1,542		Lite 360	114	surface	zero
						Type 5 280	42	---	---
8.75"	7" P110	23	12	5,421		50:50 PZ 595	181	1500'	zero
6.25"	4.5" P110	11.6	12	6,750		90	19	5610'	zero
25. TUBING RECORD									
SIZE	DEPTH SET (MD)	PACKER SET (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)	
2.375	5.033								
26. PRODUCING INTERVALS					27. PERFORATION RECORD				
FORMATION NAME	TOP (MD)	BOTTOM (MD)	TOP (TVD)	BOTTOM (TVD)	INTERVAL (Top/Bot - MD)	SIZE	NO. HOLES	PERFORATION STATUS	
(A) Navajo	6,058	-6,750	6,036		6,378 6,388	10'	40	Open <input checked="" type="checkbox"/>	Squeezed <input type="checkbox"/>
(B) Navajo	6,058	-6,750	6,036		6,310 6,334	24'	96	Open <input checked="" type="checkbox"/>	Squeezed <input type="checkbox"/>
(C)								Open <input type="checkbox"/>	Squeezed <input type="checkbox"/>
(D)								Open <input type="checkbox"/>	Squeezed <input type="checkbox"/>
28. ACID, FRACTURE, TREATMENT, CEMENT SQUEEZE, ETC.									
DEPTH INTERVAL	AMOUNT AND TYPE OF MATERIAL								
6378 - 6388	1000 gal 7-1/2% NEHCL w/ 60 BS								
6310 - 6334	1500 gal 7-1/2% NEHCL w/ 190 BS								
29. ENCLOSED ATTACHMENTS: <input checked="" type="checkbox"/> ELECTRICAL/MECHANICAL LOGS <input type="checkbox"/> SUNDRY NOTICE FOR PLUGGING AND CEMENT VERIFICATION <input checked="" type="checkbox"/> GEOLOGIC REPORT <input checked="" type="checkbox"/> CORE ANALYSIS <input checked="" type="checkbox"/> DST REPORT <input checked="" type="checkbox"/> OTHER: Mud Log <input checked="" type="checkbox"/> DIRECTIONAL SURVEY									
30. WELL STATUS: Producing									

31. INITIAL PRODUCTION

INTERVAL A (As shown in item #26)

DATE FIRST PRODUCED: 11/1/2004		TEST DATE: 11/1/2004		HOURS TESTED: 12		TEST PRODUCTION RATES: →		OIL - BBL: 461		GAS - MCF: 0		WATER - BBL: 0		PROD. METHOD: pump							
CHOKE SIZE: N/A		TBG. PRESS. 415		CSG. PRESS. 415		API GRAVITY 42.00		BTU - GAS		GAS/OIL RATIO		24 HR PRODUCTION RATES: →		OIL - BBL: 922		GAS - MCF: 0		WATER - BBL: 0		INTERVAL STATUS: comm w/ interval B	

INTERVAL B (As shown in item #26)

DATE FIRST PRODUCED: 11/1/2004		TEST DATE: 11/1/2004		HOURS TESTED: 12		TEST PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	PROD. METHOD: pump
CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	INTERVAL STATUS: comm/ w interval A

INTERVAL C (As shown in item #26)

DATE FIRST PRODUCED:		TEST DATE:		HOURS TESTED:		TEST P RODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	PROD. METHOD:
CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU – GAS	GAS/OIL RATIO	24 HR F RODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	INTERVAL STATUS:

INTERVAL D (As shown in item #26)

DATE FIRST PRODUCED:		TEST DATE:		HOURS TESTED:		TEST PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	PROD. METHOD:
CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	INTERVAL STATUS:

32. DISPOSITION OF GAS (Sold, Used for Fuel, Vented, Etc.)

vented

33. SUMMARY OF POROUS ZONES (Include Aquifers):

Show all important zones of porosity and contents thereof: Cored intervals and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures and recoveries.

Formation	Top (MD)	Bottom (MD)	Descriptions, Contents, etc.	Name	Top (Measured Depth)
Twin Creek Limestone	5,690	6,002	DST #1; 5435' - 5860'; 7/29/04 Recover 4600' gas & emulsified mud cut oil 31 bbls, 80% oil, 19% gas 1% BSW, 42 gravity API (see attached)	Top of Twin Creek Limestone	5.690
Twin Creek Limestone	5,716	5,746	Core #1-Cut 30', rec 30' (see attached)	Base of Twin Creek Limestone	6.058
	5,746	5,766	Core #2-Cut 20', rec 18' (see attached)	Top of Navajo Sandstone	6.058
	5,766	5,806	Core #3-Cut 40', rec 39.8' (see attach)		
Navajo	6,084	6,108	Core #4-Cut 24', rec 24' (see attached)		
	6,120	6,180	Core #5-Cut 60', rec 60.5' (see attach)		

35. ADDITIONAL REMARKS (Include plugging procedure)

None

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records.

NAME (PLEASE PRINT) John P. Vrona TITLE Manager of Geology
 SIGNATURE John P. Vrona DATE 12-22-04

This report must be submitted within 30 days of

- completing or plugging a new well
- drilling horizontal laterals from an existing well bore
- recompleting to a different producing formation
- reentering a previously plugged and abandoned well
- significantly deepening an existing well bore below the previous bottom-hole depth
- drilling hydrocarbon exploratory holes, such as core samples and stratigraphic tests

* ITEM 20: Show the number of completions if production is measured separately from two or more formations.

** ITEM 24: Cement Top - Show how reported top(s) of cement were determined (circulated (CIR), calculated (CAL), cement bond log (CBL), temperature survey (TS)).

Send to: Utah Division of Oil, Gas and Mining
 1594 West North Temple, Suite 1210
 Box 145801
 Salt Lake City, Utah 84114-5801

Phone: 801-538-5340

Fax: 801-359-3940

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CORE DESCRIPTIONS

Wolverine Gas & Oil
Wolverine Federal #17-2
SE/SW Sec. 17, T23S, R1W
Sevier Co., UT

Core #1	5716-5746	Cut 30'-Recovered 30'	Twin Creek Formation
5716	LIMESTONE -medium to dark gray, hard, tight, dense, microcrystalline, mudstone, fractures are horizontal to inclined, massive, fractures are filled with oil and lined with calcite and anhydrite, brown oil stain, yellow gold oil fluorescence, blue white cut fluorescence, yellow gold residual ring cut fluorescence, scattered fracture porosity.		
5719	LIMESTONE -medium to dark gray, hard, tight, dense, microcrystalline, mudstone, massive, very fine to fine sucrosic texture on fracture faces, mottled brown oil stain, yellow gold oil fluorescence, blue white cut fluorescence, yellow gold residual ring cut fluorescence, scattered fracture porosity.		
5722	LIMESTONE -medium to dark gray, hard, tight, dense, microcrystalline, mudstone, massive, white anhydrite and calcite lining fracture openings, spotted yellow gold oil fluorescence, weaker show, slower cut, thinner ring.		
5725	LIMESTONE -medium to dark gray, hard, tight, dense, microcrystalline, mudstone, massive, mottled brown oil stain, yellow gold oil fluorescence, blue white cut fluorescence, yellow gold residual ring cut fluorescence, scattered fracture porosity.		
5728	LIMESTONE -medium to dark gray, hard, tight, dense, microcrystalline, mudstone, massive, mottled brown oil stain, yellow gold oil fluorescence, blue white cut fluorescence, yellow gold residual ring cut fluorescence, scattered fracture porosity.		
5731	LIMESTONE -medium to dark gray, hard, tight, dense, microcrystalline, mudstone, massive, open fracture (2-3 cm) bleeding oil, mottled brown oil stain, yellow gold oil fluorescence, blue white cut fluorescence, yellow gold residual ring cut fluorescence, scattered fracture porosity.		

- 5734 **LIMESTONE**-medium to dark gray, hard, tight, dense, microcrystalline, mudstone, massive, mottled brown oil stain, yellow gold oil fluorescence, blue white cut fluorescence, yellow gold residual ring cut fluorescence, scattered fracture porosity.
- 5737 **LIMESTONE**-medium to dark gray, hard, tight, dense, microcrystalline, mudstone, massive, bleeding oil on break point, brown oil stain, yellow gold oil fluorescence, blue white cut fluorescence, yellow gold residual ring cut fluorescence, scattered fracture porosity.
- 5740 **LIMESTONE**-medium to dark gray, hard, tight, dense, microcrystalline, mudstone, massive, mottled brown oil stain, yellow gold oil fluorescence, blue white cut fluorescence, yellow gold residual ring cut fluorescence, scattered fracture porosity.
- 5743 **LIMESTONE**-medium to dark gray, hard, tight, dense, microcrystalline, mudstone, massive, mottled brown oil stain, yellow gold oil fluorescence, blue white cut fluorescence, yellow gold residual ring cut fluorescence, scattered fracture porosity.
- 5746 **LIMESTONE**-medium to dark gray, hard, tight, dense, microcrystalline, mudstone, massive, inclined wavy fracture (57 degree), oil running from core barrel, mottled brown oil stain, yellow gold oil fluorescence, blue white cut fluorescence, yellow gold residual ring cut fluorescence, scattered fracture porosity.

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CORE DESCRIPTIONS

**Wolverine Gas & Oil
Wolverine Federal #17-2
SE/SW Sec. 17, T23S, R1W
Sevier Co., UT**

Core #2	5746-5766	Cut 20'-Recovered 18'	Twin Creek Formation
5747.5	LIMESTONE -light to dark gray brown, hard, tight, dense, microcrystalline, mudstone, massive, rubblized and fractured in part, fractures are horizontal to inclined, fractures are filled with oil and lined with calcite and anhydrite, brown oil stain, yellow gold oil fluorescence, blue white cut fluorescence, yellow gold residual ring cut fluorescence, scattered fracture porosity.		
5750.5	LIMESTONE -medium to dark gray brown, hard, tight, dense, microcrystalline, mudstone, massive, abundant oil & drilling mud dripping from break point, fractures are horizontal to inclined, fractures are filled with oil and lined with calcite and anhydrite, brown oil stain, yellow gold oil fluorescence, blue white cut fluorescence, yellow gold residual ring cut fluorescence, scattered fracture porosity.		
5753.5	LIMESTONE -medium to dark gray brown, hard, tight, dense, microcrystalline, mudstone, massive, fractures faces are stained with brown oil stain, yellow gold oil fluorescence, blue white cut fluorescence, yellow gold residual ring cut fluorescence, scattered fracture porosity.		
5756.5	LIMESTONE -medium to dark gray brown, hard, tight, dense, microcrystalline, mudstone, massive, abundant oil & drilling mud dripping from break point, fractures are horizontal to inclined, fractures are filled with oil and lined with calcite and anhydrite, brown oil stain, yellow gold oil fluorescence, blue white cut fluorescence, yellow gold residual ring cut fluorescence, scattered fracture porosity.		
5759.5	LIMESTONE -light to dark gray brown, hard, tight, dense, microcrystalline, mudstone, massive, rubblized and fractured in part, fractures are horizontal to inclined, fractures are filled with oil and lined with calcite and anhydrite, brown oil stain, yellow gold oil fluorescence, blue white cut fluorescence, yellow gold residual ring cut fluorescence, scattered fracture porosity.		

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5762.5 **LIMESTONE**-(Note-No Sample Taken)wavy to horizontal depositional laminations, medium to dark gray brown, hard, tight, dense, microcrystalline, mudstone, massive, fractures faces are stained with brown oil stain, yellow gold oil fluorescence, blue white cut fluorescence, yellow gold residual ring cut fluorescence, scattered fracture porosity.

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CORE DESCRIPTIONS

**Wolverine Gas & Oil
Wolverine Federal #17-2
SE/SW Sec. 17,T23S,R1W
Sevier Co., UT**

Core#3	4746-5806	Cut 40'-Recovered 39.8'	Twin Creek Formation
5768	LIMESTONE-gray brown, hard, tight, dense, microcrystalline to cryptocrystalline, mudstone, stylolites, massive, rare fractures with bleeding oil, yellow gold oil fluorescence from areas with oil stain, blue white milky cut fluorescence, yellow gold residual ring cut.		
5769	LIMESTONE-light to medium gray, very fine to fine crystalline, wavy to horizontal laminations, sucrosic texture in part, massive, rare fractures with bleeding oil, yellow gold oil fluorescence from areas with oil stain, blue white milky cut fluorescence, yellow gold residual ring cut.		
5772	LIMESTONE-gray brown, hard, dense, microcrystalline, mudstone, stylolites, inclined to horizontal depositional laminations, biotite flecks, massive, rare fractures with bleeding oil, yellow gold oil fluorescence from areas with oil stain, blue white milky cut fluorescence, yellow gold residual ring cut.		
5775	LIMESTONE-gray brown, hard, dense, microcrystalline, mudstone, stylolites, inclined to horizontal depositional laminations, biotite flecks, massive, rare fractures with bleeding oil, yellow gold oil fluorescence from areas with oil stain, blue white milky cut fluorescence, yellow gold residual ring cut.		
5776	LIMESTONE-gray brown, hard, dense, microcrystalline, mudstone, stylolites vertical to horizontal, inclined to horizontal depositional laminations, biotite flecks, massive, fractures filled with calcite, rare fractures with bleeding oil, yellow gold oil fluorescence from areas with oil stain, blue white milky cut fluorescence, yellow gold residual ring cut.		
5779	LIMESTONE-gray brown, hard, dense, microcrystalline, mudstone, stylolites, inclined to horizontal depositional laminations, biotite flecks, massive, rare fractures with bleeding oil, yellow gold oil fluorescence from areas with oil stain, blue white milky cut fluorescence, yellow gold residual ring cut.		

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- 5782 Limestone-gray brown, hard, dense, microcrystalline, mudstone, stylolites, inclined to horizontal depositional laminations, biotite flecks, massive, reworked with grain stone laminations, rare fractures with bleeding oil, yellow gold oil fluorescence from areas with oil stain, blue white milky cut fluorescence, yellow gold residual ring cut.
- 5785 Limestone-gray brown, hard, dense, microcrystalline, mudstone, stylolites, inclined to horizontal depositional laminations, biotite flecks, massive, rare fractures with bleeding oil, yellow gold oil fluorescence from areas with oil stain, blue white milky cut fluorescence, yellow gold residual ring cut.
- 5788 Limestone-gray brown, hard, dense, microcrystalline, mudstone, stylolites, inclined to horizontal depositional laminations, biotite flecks, massive, fractures filled with calcite, rare fractures with bleeding oil, yellow gold oil fluorescence from areas with oil stain, blue white milky cut fluorescence, yellow gold residual ring cut.
- 5791 Limestone-gray brown, hard, dense, microcrystalline, mudstone, stylolites, inclined to horizontal depositional laminations, biotite flecks, massive, fractures filled with calcite, rare fractures with bleeding oil, yellow gold oil fluorescence from areas with oil stain, blue white milky cut fluorescence, yellow gold residual ring cut.
- 5794 Limestone-gray brown, hard, dense, microcrystalline, mudstone, stylolites, inclined to horizontal depositional laminations, biotite flecks, massive, fractures filled with calcite, rare fractures with bleeding oil, yellow gold oil fluorescence from areas with oil stain, blue white milky cut fluorescence, yellow gold residual ring cut.
- 5797 Limestone-gray brown, hard, dense, churned, bioturbated, burrowed, microcrystalline, mudstone, stylolites, inclined to horizontal depositional laminations, biotite flecks, massive, fractures filled with calcite, rare fractures with bleeding oil, yellow gold oil fluorescence from areas with oil stain, blue white milky cut fluorescence, yellow gold residual ring cut.
- 5800 Limestone-gray brown, light colored shows reworking, hard, dense, microcrystalline, mudstone, stylolites, inclined to horizontal depositional laminations, biotite flecks, massive, fractures filled with calcite, rare fractures with bleeding oil, yellow gold oil fluorescence from areas with oil stain, blue white milky cut fluorescence, yellow gold residual ring cut.

- 5803 Limestone-gray brown, light colored shows reworking, bioturbated, in part, calcite gulls, hard, dense, microcrystalline, mudstone, stylolites, inclined to horizontal depositional laminations, biotite flecks, massive, fractures filled with calcite, rare fractures with bleeding oil, yellow gold oil fluorescence from areas with oil stain, blue white milky cut fluorescence, yellow gold residual ring cut.
- 5806 Limestone-gray brown, light colored shows reworking, rubblized in part, bioturbated, in part, calcite gulls, hard, dense, microcrystalline, mudstone, stylolites, inclined to horizontal depositional laminations, biotite flecks, massive, fractures filled with calcite, rare fractures with bleeding oil, yellow gold oil fluorescence from areas with oil stain, blue white milky cut fluorescence, yellow gold residual ring cut.

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CORE DESCRIPTIONS

**Wolverine Gas & Oil
Wolverine Federal #17-2
SE/SW Sec. 17,T23S,R1W
Sevier Co., UT**

Core #4	6084-6108	Cut 24'-Recovered 24'	Navajo Formation
6086	SANDSTONE-white, clear, quartzose, light gray brown, fine (upper) to medium (lower) grained, sub angular, fair to poor sorted, clay matrix, siliceous cement, 12-14% inter granular porosity, friable to firm, inter dune package, horizontal depositional laminations, even brown oil stain, bleeding gas and oil, yellow-brown oil fluorescence, blue white milky cut fluorescence, yellow gold residual ring cut fluorescence.		
6089	SANDSTONE-white, clear, quartzose, light gray brown, fine (upper) to medium (lower) grained, sub angular, fair to poor sorted, clay matrix, siliceous cement, 12-14% inter granular porosity, friable to firm, dark gray to black mineral divides laminations, 20 degree depositional laminations, even brown oil stain, bleeding gas and oil, yellow-brown oil fluorescence, blue white milky cut fluorescence, yellow gold residual ring cut fluorescence.		
6092	SANDSTONE-white, clear, quartzose, light gray brown, fine (upper) to medium (lower) grained, sub angular, fair to poor sorted, clay matrix, siliceous cement, 12-14% inter granular porosity, friable to firm, horizontal depositional laminations, even brown oil stain, bleeding gas and oil, yellow-brown oil fluorescence, blue white milky cut fluorescence, yellow gold residual ring cut fluorescence.		
6095	SANDSTONE-white, clear, quartzose, light gray brown, fine (upper) to medium (lower) grained, sub angular, fair to poor sorted, clay matrix, siliceous cement, 12-14% inter granular porosity, friable to firm, horizontal to wavy depositional laminations, even brown oil stain, increase in bleeding gas and oil, yellow-brown oil fluorescence, blue white milky cut fluorescence, yellow gold residual ring cut fluorescence.		
6098	SANDSTONE-white, clear, quartzose, light gray brown, fine (upper) to medium (lower) grained, sub angular, fair to poor sorted, clay matrix, siliceous cement, 12-14% inter granular porosity, friable to firm, horizontal to wavy depositional laminations, even brown oil stain, increase in bleeding gas and oil, yellow-brown oil fluorescence, blue white milky cut fluorescence, yellow gold residual ring cut fluorescence.		

- 6101 SANDSTONE-white, clear, quartzose, light gray brown, fine (upper) to medium (lower) grained, sub angular, fair to poor sorted, clay matrix, siliceous cement, 12-14% inter granular porosity, friable to firm, horizontal to wavy depositional laminations, even brown oil stain, increase in bleeding gas and oil, yellow-brown oil fluorescence, blue white milky cut fluorescence, yellow gold residual ring cut fluorescence.
- 6104 SANDSTONE-white, clear, quartzose, light gray brown, very fine(upper) to fine (lower) grained, sub angular, fair to poor sorted, clay matrix, siliceous cement, 6-8% inter granular porosity, friable to firm, light mineral banding, horizontal to wavy depositional laminations, even brown oil stain, yellow-brown oil fluorescence, blue white milky cut fluorescence, yellow gold residual ring cut fluorescence.
- 6108 SANDSTONE-white, clear, quartzose, light gray brown, very fine(upper) to fine (lower) grained, sub angular, fair to poor sorted, clay matrix, siliceous cement, 6-8% inter granular porosity, friable to hard, light mineral banding, horizontal to wavy depositional laminations (toe set), even brown oil stain, yellow-brown oil fluorescence, blue white milky cut fluorescence, yellow gold residual ring cut fluorescence.

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CORE DESCRIPTIONS

Wolverine Gas & Oil
Wolverine Federal #17-2
SE/SW Sec. 17, T23S, R1W
Sevier Co., UT

Core #5	6120-6180	Cut 60'-Recovered 60.5'	Navajo Formation
6121	SANDSTONE-white, clear, quartzose, light brown, fine (upper) to medium (upper) grained, sub angular, fair to poor sorted, clay matrix siliceous cement, friable, 10-14% inter granular porosity, bleeding oil and gas, brown oil stain, yellow oil fluorescence, blue white milky cut fluorescence, yellow gold residual ring, brown black oil ring.		
6124	SANDSTONE-white, clear, quartzose, light brown, fine (lower) to medium (upper) grained, sub angular, poor sorted, clay matrix siliceous cement, friable, 10-12% inter granular porosity, stylolites, vertical fractures, horizontal depositional laminations, bleeding oil and gas, brown oil stain, yellow oil fluorescence, blue white milky cut fluorescence, yellow gold residual ring, brown black oil ring.		
6127	SANDSTONE-white, clear, quartzose, light brown, fine (upper) to medium (lower) grained, sub angular, fair to poor sorted, clay matrix siliceous cement, friable, 10-14% inter granular porosity, cross bedded (30deg.), bleeding oil and gas, brown oil stain, yellow oil fluorescence, blue white milky cut fluorescence, yellow gold residual ring, brown black oil ring.		
6130	SANDSTONE-white, clear, quartzose, light brown, fine (upper) to medium (lower) grained, sub angular, fair to poor sorted, clay matrix siliceous cement, friable, 10-14% inter granular porosity, cross bedded (30deg.), bleeding oil and gas, brown oil stain, yellow oil fluorescence, blue white milky cut fluorescence, yellow gold residual ring, brown black oil ring.		
6133	SANDSTONE-white, clear, quartzose, light brown, fine (upper) to medium (lower) grained, sub angular, fair to poor sorted, clay matrix siliceous cement, friable, 10-14% inter granular porosity, cross bedded (15-20deg.), bleeding oil and gas, brown oil stain, yellow oil fluorescence, blue white milky cut fluorescence, yellow gold residual ring, brown black oil ring.		

- 6136 SANDSTONE-white, clear, quartzose, light brown, fine (upper) to medium (lower) grained, sub angular, fair to poor sorted, clay matrix siliceous cement, friable, 10-12% inter granular porosity, horizontal to wavy depositional laminations, bleeding oil and gas, brown oil stain, yellow oil fluorescence, blue white milky cut fluorescence, yellow gold residual ring, brown black oil ring.
- 6139 SANDSTONE-white, clear, quartzose, light brown, fine (upper) to medium (lower) grained, sub angular, fair to poor sorted, clay matrix siliceous cement, silty matrix in part, clay filled, 6-8% inter granular porosity, horizontal to wavy depositional laminations, bleeding oil and gas, brown oil stain, yellow oil fluorescence, blue white milky cut fluorescence, yellow gold residual ring, brown black oil ring.
- 6142 SANDSTONE-white, clear, quartzose, light brown, fine (upper) to medium (upper) grained, sub angular, fair to poor sorted, clay matrix siliceous cement, friable, 8-10% inter granular porosity, banded with white mineral, horizontal to wavy depositional laminations, bleeding oil and gas, brown oil stain, yellow oil fluorescence, blue white milky cut fluorescence, yellow gold residual ring, brown black oil ring.
- 6145 SANDSTONE-white, clear, quartzose, light brown, fine (upper) to medium (upper) grained, sub angular, fair to poor sorted, clay matrix siliceous cement, friable, 10-14% inter granular porosity, horizontal to wavy depositional laminations, bleeding oil and gas, brown oil stain, yellow oil fluorescence, blue white milky cut fluorescence, yellow gold residual ring, brown black oil ring.
- 6149 SANDSTONE-white, clear, quartzose, light brown, fine (upper) to medium (upper) grained, sub angular, fair to poor sorted, clay matrix siliceous cement, friable, 10-14% inter granular porosity, horizontal to wavy depositional laminations, bleeding oil and gas, brown oil stain, yellow oil fluorescence, blue white milky cut fluorescence, yellow gold residual ring, brown black oil ring.
- 6152 SANDSTONE-white, clear, quartzose, light brown, fine (lower) to medium (upper) grained, sub angular, fair to poor sorted, clay matrix siliceous cement, friable, 10-14% inter granular porosity, horizontal to wavy depositional laminations, bleeding oil and gas, brown oil stain, yellow oil fluorescence, blue white milky cut fluorescence, yellow gold residual ring, brown black oil ring.

- 6155 SANDSTONE-white, clear, quartzose, light brown, fine (lower) to medium (upper) grained, sub angular, fair to poor sorted, clay matrix siliceous cement, friable, 10-14% inter granular porosity, horizontal to wavy depositional laminations, bleeding oil and gas, brown oil stain, yellow oil fluorescence, blue white milky cut fluorescence, yellow gold residual ring, brown black oil ring.
- 6158 SANDSTONE-white, clear, quartzose, light brown, fine (lower) to medium (upper) grained, sub angular, fair to poor sorted, clay matrix siliceous cement, friable, 10-14% intergranular porosity, horizontal to wavy depositional laminations, bleeding oil and gas, strong hydrocarbon odor, brown oil stain, yellow oil fluorescence, blue white milky cut fluorescence, yellow gold residual ring, brown black oil ring.
- 6161 SANDSTONE-white, clear, quartzose, light brown, fine (lower) to medium (upper) grained, sub angular, fair to poor sorted, clay matrix siliceous cement, friable, 10-14% inter granular porosity, cross bedded (30 deg.), bleeding oil and gas, strong hydrocarbon odor, brown oil stain, yellow oil fluorescence, blue white milky cut fluorescence, yellow gold residual ring, brown black oil ring.
- 6164 SANDSTONE-white, clear, quartzose, light brown, fine (upper) to medium (lower) grained, sub angular, fair to poor sorted, clay matrix siliceous cement, friable, 10-14% inter granular porosity, dark bedding laminations, bleeding oil and gas, strong hydrocarbon odor, brown oil stain, yellow oil fluorescence, blue white milky cut fluorescence, yellow gold residual ring, brown black oil ring.
- 6167 SANDSTONE-white, clear, quartzose, light brown, fine (upper) to medium (upper) grained, sub angular, fair to poor sorted, clay matrix siliceous cement, friable, 10-14% inter granular porosity, dark bedding laminations, bleeding oil and gas, strong hydrocarbon odor, brown oil stain, yellow oil fluorescence, blue white milky cut fluorescence, yellow gold residual ring, brown black oil ring.
- 6780 SANDSTONE-white, clear, quartzose, light brown, fine (lower) to medium (upper) grained, sub angular, fair to poor sorted, clay matrix siliceous cement, friable, 10-14% inter granular porosity, cross bedded (40 deg.), 3-4" spacing, bleeding oil and gas, strong hydrocarbon odor, brown oil stain, yellow oil fluorescence, blue white milky cut fluorescence, yellow gold residual ring, brown black oil ring.

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- 6173 SANDSTONE-white, clear, quartzose, light brown, fine (lower) to medium (upper) grained, sub angular, fair to poor sorted, clay matrix siliceous cement, friable, 10-14% inter granular porosity, cross bedded (5-10 deg.), bleeding oil and gas, strong hydrocarbon odor, brown oil stain, yellow oil fluorescence, blue white milky cut fluorescence, yellow gold residual ring, brown black oil ring.
- 6176 SANDSTONE-white, clear, quartzose, light brown, fine (upper) to medium (upper) grained, sub angular, fair to poor sorted, clay matrix siliceous cement, friable, 10-14% inter granular porosity, cross bedded (35 deg.), bleeding oil and gas, strong hydrocarbon odor, brown oil stain, yellow oil fluorescence, blue white milky cut fluorescence, yellow gold residual ring, brown black oil ring.
- 6180 SANDSTONE-white, clear, quartzose, light brown, fine (lower) to medium (upper) grained, sub angular, fair to poor sorted, clay matrix siliceous cement, friable, 10-14% inter granular porosity, cross bedded (5-10 deg.), bleeding oil and gas, strong hydrocarbon odor, brown oil stain, yellow oil fluorescence, blue white milky cut fluorescence, yellow gold residual ring, brown black oil ring.



Weatherford*

Directional Services

Job Number: WYO0704D132 State/Country: Ut,Seiver
 Company: Wolverine Gas And Oil of Utah LLC Declination: 12.93592
 Lease/Well: Wolverine Federal # 17-2 Grid: 0.93
 Location: Sec 17,T23S,R1W File name: C:\SURVEY\WOLVER-1\17-2.SVY
 Rig Name: CDX #10 Date/Time: 19-Aug-04 / 10:47
 RKB: SHL:830 FSL & 1901 FWL Sec 17 Curve Name: Sidetrack
 G.L. or M.S.L.: BHL: 660 FSL & 1980 FWL Sec 17

WINSERVE SURVEY CALCULATIONS
 Minimum Curvature Method
 Vertical Section Plane 155.08
 Vertical Section Referenced to Wellhead
 Rectangular Coordinates Referenced to Wellhead

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	Course Length FT	True Vertical Depth	N-S FT	E-W FT	Vertical Section FT	Dogleg Severity Deg/100	CLOSURE Distance FT	Direction Deg
80.00	.00	.00		80.00	.00	.00	.00	.00	.00	.00
125.00	.50	268.40	45.00	125.00	-.01	-.20	-.08	1.11	.20	268.40
248.00	1.00	257.10	123.00	247.99	-.26	-1.78	-.51	.42	1.80	261.68
338.00	1.40	254.80	90.00	337.97	-.72	-3.61	-.86	.45	3.68	258.65
428.00	1.90	251.60	90.00	427.93	-1.48	-6.08	-1.22	.56	6.26	256.30
516.00	2.20	250.30	88.00	515.87	-2.51	-9.06	-1.54	.34	9.40	254.49
603.00	2.70	246.00	87.00	602.79	-3.91	-12.50	-1.72	.61	13.10	252.64
690.00	3.30	241.30	87.00	689.68	-5.95	-16.57	-1.59	.74	17.60	250.26
786.00	3.40	236.40	96.00	785.51	-8.85	-21.36	-.98	.32	23.12	247.50
881.00	3.50	230.20	95.00	880.34	-12.26	-25.94	.19	.41	28.69	244.70
975.00	3.80	229.70	94.00	974.15	-16.11	-30.52	1.75	.32	34.51	242.17
1070.00	3.40	218.70	95.00	1068.96	-20.35	-34.68	3.84	.84	40.21	239.60
1164.00	2.50	220.10	94.00	1162.84	-24.09	-37.74	5.94	.96	44.78	237.45
1259.00	1.70	216.60	95.00	1257.77	-26.81	-39.92	7.49	.85	48.09	236.12
1354.00	2.10	213.90	95.00	1352.72	-29.38	-41.73	9.06	.43	51.04	234.85
1492.00	2.60	222.20	138.00	1490.60	-33.80	-45.24	11.59	.44	56.48	233.24
1781.00	5.60	268.90	289.00	1778.90	-38.93	-63.75	8.44	1.47	74.70	238.59
1841.00	6.30	280.90	60.00	1838.58	-38.36	-69.91	5.33	2.37	79.75	241.24
1903.00	6.60	273.10	62.00	1900.19	-37.53	-76.81	1.66	1.49	85.49	243.96
1936.00	7.10	271.00	33.00	1932.95	-37.39	-80.74	-.12	1.69	88.98	245.15

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Measured Depth FT	Incl Angle Deg	Drift Direction Deg	Course Length FT	True Vertical Depth	N-S FT	E-W FT	Vertical Section FT	Dogleg Severity Deg/100	C L O S U R E Distance FT	Direction Deg
1968.00	7.90	270.20	32.00	1964.68	-37.35	-84.92	-1.92	2.52	92.77	246.26
1999.00	8.60	266.20	31.00	1995.36	-37.49	-89.36	-3.66	2.92	96.91	247.24
2031.00	9.90	257.30	32.00	2026.94	-38.26	-94.43	-5.10	6.03	101.89	247.95
2063.00	10.50	246.20	32.00	2058.44	-40.04	-99.79	-5.74	6.41	107.52	248.14
2095.00	9.80	234.60	32.00	2089.94	-42.79	-104.67	-5.30	6.74	113.08	247.76
2127.00	9.00	221.60	32.00	2121.51	-46.24	-108.56	-3.81	7.07	118.00	246.93
2158.00	9.20	214.20	31.00	2152.12	-50.11	-111.56	-1.57	3.83	122.30	245.81
2190.00	9.60	215.80	32.00	2183.69	-54.39	-114.56	1.04	1.49	126.81	244.60
2222.00	9.60	218.90	32.00	2215.25	-58.63	-117.79	3.53	1.62	131.58	243.54
2253.00	9.70	218.00	31.00	2245.81	-62.70	-121.03	5.85	.58	136.30	242.61
2283.00	9.00	213.10	30.00	2275.41	-66.65	-123.86	8.25	3.53	140.66	241.71
2316.00	8.00	205.60	33.00	2308.05	-70.89	-126.27	11.07	4.52	144.80	240.69
2348.00	7.50	197.10	32.00	2339.76	-74.89	-127.84	14.04	3.90	148.16	239.64
2380.00	6.20	184.30	32.00	2371.53	-78.61	-128.59	17.10	6.24	150.71	238.56
2412.00	5.00	174.00	32.00	2403.38	-81.72	-128.57	19.93	4.88	152.34	237.56
2441.00	3.90	157.40	29.00	2432.29	-83.89	-128.06	22.11	5.80	153.09	236.77
2474.00	3.40	141.00	33.00	2465.22	-85.69	-127.01	24.18	3.49	153.21	235.99
2570.00	3.80	136.60	96.00	2561.03	-90.21	-123.03	29.96	.51	152.56	233.75
2633.00	4.70	147.10	63.00	2623.86	-93.89	-120.20	34.49	1.88	152.52	232.00
2665.00	4.90	148.60	32.00	2655.75	-96.16	-118.77	37.15	.74	152.82	231.01
2696.00	4.70	146.30	31.00	2686.64	-98.35	-117.38	39.72	.90	153.13	230.04
2728.00	4.90	145.50	32.00	2718.53	-100.56	-115.88	42.37	.66	153.43	229.05
2760.00	4.80	138.20	32.00	2750.41	-102.69	-114.21	44.99	1.95	153.59	228.04
2792.00	4.30	129.20	32.00	2782.31	-104.45	-112.39	47.35	2.72	153.43	227.10
2823.00	4.20	116.20	31.00	2813.23	-105.68	-110.47	49.28	3.12	152.88	226.27
2855.00	4.50	112.40	32.00	2845.14	-106.68	-108.26	51.12	1.30	151.99	225.42
2887.00	4.70	114.00	32.00	2877.03	-107.69	-105.90	53.03	.74	151.03	224.52
2919.00	5.00	115.20	32.00	2908.92	-108.82	-103.44	55.09	.99	150.14	223.55
2950.00	5.30	112.50	31.00	2939.79	-109.94	-100.89	57.18	1.24	149.22	222.54
2982.00	5.50	106.10	32.00	2971.65	-110.93	-98.06	59.27	1.98	148.05	221.47
3013.00	4.80	90.10	31.00	3002.53	-111.34	-95.33	60.80	5.13	146.58	220.57
3044.00	4.20	80.60	31.00	3033.43	-111.16	-92.91	61.65	3.08	144.88	219.89
3076.00	3.70	82.30	32.00	3065.36	-110.83	-90.73	62.27	1.60	143.24	219.31
3108.00	2.60	116.40	32.00	3097.31	-111.02	-89.06	63.14	6.64	142.32	218.74
3139.00	2.90	131.80	31.00	3128.28	-111.85	-87.85	64.41	2.56	142.22	218.15
3202.00	3.90	138.20	63.00	3191.16	-114.51	-85.23	67.93	1.70	142.75	216.66
3265.00	2.70	193.60	63.00	3254.07	-117.55	-84.15	71.14	5.15	144.57	215.60
3344.00	5.40	221.10	79.00	3332.88	-122.16	-87.03	74.11	4.12	149.99	215.47
3375.00	6.30	227.10	31.00	3363.71	-124.42	-89.24	75.22	3.51	153.11	215.65
3406.00	6.20	223.00	31.00	3394.53	-126.80	-91.63	76.38	1.48	156.44	215.85

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Measured Depth FT	Incl Angle Deg	Drift Direction Deg	Course Length FT	True Vertical Depth	N-S FT	E-W FT	Vertical Section FT	Dogleg Severity Deg/100	C L O S U R E	
									Distance FT	Direction Deg
3437.00	5.20	210.90	31.00	3425.38	-129.23	-93.49	77.80	5.03	159.50	215.88
3469.00	4.30	200.80	32.00	3457.27	-131.60	-94.66	79.45	3.83	162.10	215.73
3501.00	3.90	198.30	32.00	3489.19	-133.75	-95.43	81.08	1.37	164.30	215.51
3532.00	3.60	190.00	31.00	3520.12	-135.71	-95.93	82.64	2.00	166.19	215.25
3564.00	2.80	175.40	32.00	3552.07	-137.48	-96.04	84.20	3.55	167.70	214.94
3595.00	2.10	152.70	31.00	3583.04	-138.74	-95.72	85.48	3.82	168.55	214.60
3627.00	1.70	133.90	32.00	3615.02	-139.59	-95.11	86.51	2.30	168.91	214.27
3659.00	1.80	104.50	32.00	3647.01	-140.04	-94.28	87.27	2.79	168.82	213.95
3687.00	2.20	105.40	28.00	3674.99	-140.30	-93.33	87.90	1.43	168.51	213.63
3719.00	2.60	105.40	32.00	3706.96	-140.65	-92.04	88.76	1.25	168.09	213.20
3750.00	3.00	109.70	31.00	3737.93	-141.11	-90.60	89.79	1.46	167.69	212.70
3781.00	3.30	107.10	31.00	3768.88	-141.65	-88.98	90.96	1.07	167.28	212.14
3812.00	3.90	100.00	31.00	3799.82	-142.09	-87.09	92.16	2.41	166.66	211.51
3843.00	5.10	82.20	31.00	3830.73	-142.09	-84.69	93.17	5.90	165.41	210.80
3875.00	6.70	70.30	32.00	3862.56	-141.27	-81.52	93.75	6.27	163.10	209.99
3906.00	6.40	70.30	31.00	3893.35	-140.08	-78.19	94.08	.97	160.42	209.17
3968.00	5.40	62.00	62.00	3955.03	-137.54	-72.36	94.23	2.12	155.42	207.75
4000.00	5.28	58.48	32.00	3986.89	-136.06	-69.78	93.98	1.09	152.91	207.15
4031.00	4.40	44.40	31.00	4017.78	-134.47	-67.73	93.40	4.75	150.56	206.73
4062.00	4.30	35.80	31.00	4048.69	-132.68	-66.22	92.41	2.13	148.28	206.52
4093.00	3.50	32.80	31.00	4079.62	-130.94	-65.03	91.34	2.66	146.20	206.41
4124.00	2.00	8.10	31.00	4110.58	-129.61	-64.44	90.38	6.06	144.74	206.44
4155.00	2.00	350.50	31.00	4141.56	-128.54	-64.45	89.41	1.97	143.79	206.63
4217.00	1.30	330.50	62.00	4203.54	-126.86	-64.98	87.66	1.45	142.53	207.12
4309.00	1.80	149.50	92.00	4295.52	-127.20	-64.76	88.06	3.37	142.73	206.98
4400.00	2.10	118.70	91.00	4386.47	-129.23	-62.57	90.82	1.18	143.58	205.84
4665.00	6.30	335.30	265.00	4651.02	-118.33	-64.39	80.18	3.05	134.72	208.55
4832.00	10.90	333.40	167.00	4816.10	-95.88	-75.29	55.22	2.76	121.91	218.14
4856.00	11.20	333.30	24.00	4839.66	-91.77	-77.36	50.62	1.25	120.02	220.13
4888.00	11.20	333.70	32.00	4871.05	-86.20	-80.13	44.41	.24	117.69	222.91
4920.00	10.80	334.70	32.00	4902.46	-80.71	-82.79	38.30	1.38	115.62	225.73
4951.00	10.50	335.20	31.00	4932.93	-75.52	-85.21	32.57	1.01	113.86	228.45
4983.00	10.30	333.90	32.00	4964.40	-70.30	-87.70	26.80	.96	112.40	231.28
5014.00	10.00	333.10	31.00	4994.91	-65.41	-90.13	21.34	1.07	111.37	234.03
5046.00	9.40	334.90	32.00	5026.46	-60.57	-92.50	15.95	2.10	110.56	236.78
5078.00	9.40	340.30	32.00	5058.03	-55.74	-94.49	10.73	2.76	109.70	239.46
5110.00	9.90	345.60	32.00	5089.58	-50.62	-96.05	5.42	3.18	108.57	242.21
5141.00	8.90	346.00	31.00	5120.16	-45.71	-97.30	.45	3.23	107.50	244.84
5173.00	7.60	347.60	32.00	5151.83	-41.24	-98.35	-4.05	4.12	106.65	247.25
5205.00	5.70	338.50	32.00	5183.61	-37.69	-99.39	-7.70	6.77	106.29	249.23

WOLVERINE
SURVEY

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	Course Length FT	True Vertical Depth	N-S FT	E-W FT	Vertical Section FT	Dogleg Severity Deg/100	CLOSURE Distance FT	Direction Deg
5236.00	5.00	344.20	31.00	5214.48	-34.96	-100.32	-10.57	2.83	106.24	250.79
5268.00	3.70	355.90	32.00	5246.38	-32.59	-100.77	-12.91	4.90	105.91	252.08
5300.00	1.00	10.40	32.00	5278.35	-31.28	-100.80	-14.11	8.57	105.54	252.76
5330.00	1.80	182.80	30.00	5308.35	-31.50	-100.77	-13.90	9.31	105.58	252.64
5363.00	3.60	190.60	33.00	5341.31	-33.03	-100.99	-12.60	5.55	106.25	251.89
5395.00	4.40	195.60	32.00	5373.23	-35.20	-101.50	-10.85	2.72	107.43	250.87
5435.00	4.00	200.00	40.00	5413.13	-37.99	-102.39	-8.70	1.28	109.21	249.64
5470.00	3.60	203.60	35.00	5448.05	-40.15	-103.25	-7.10	1.33	110.78	248.75
5501.00	2.80	197.70	31.00	5479.00	-41.76	-103.87	-5.90	2.79	111.95	248.10
5533.00	1.70	183.70	32.00	5510.98	-42.98	-104.14	-4.91	3.82	112.66	247.57
5563.00	1.10	171.80	30.00	5540.97	-43.71	-104.12	-4.24	2.21	112.93	247.23
5576.00	1.20	211.50	13.00	5553.97	-43.95	-104.18	-4.05	6.05	113.07	247.13
5593.00	1.20	273.10	17.00	5570.96	-44.09	-104.45	-4.03	7.23	113.37	247.11
5610.00	1.50	296.10	17.00	5587.96	-43.98	-104.83	-4.29	3.61	113.68	247.24
5627.00	1.90	314.60	17.00	5604.95	-43.69	-105.23	-4.73	3.97	113.93	247.45
5653.00	2.40	330.80	26.00	5630.93	-42.91	-105.80	-5.68	3.01	114.17	247.92
5685.00	2.60	335.70	32.00	5662.90	-41.66	-106.43	-7.07	.91	114.29	248.62
5717.00	2.90	337.50	32.00	5694.86	-40.25	-107.03	-8.60	.98	114.35	249.39
5749.00	2.40	318.60	32.00	5726.83	-39.00	-107.79	-10.05	3.12	114.63	250.11
5782.00	2.40	315.00	33.00	5759.80	-37.99	-108.73	-11.37	.46	115.18	250.74
5814.00	2.90	315.70	32.00	5791.77	-36.94	-109.77	-12.76	1.57	115.82	251.40
5846.00	3.60	319.70	32.00	5823.72	-35.60	-110.99	-14.49	2.30	116.55	252.22
5878.00	4.20	321.30	32.00	5855.64	-33.92	-112.37	-16.60	1.91	117.38	253.21
5910.00	4.50	321.10	32.00	5887.55	-32.02	-113.89	-18.95	.94	118.31	254.30
5942.00	4.90	321.60	32.00	5919.44	-29.98	-115.53	-21.50	1.26	119.35	255.45
5974.00	5.10	323.60	32.00	5951.32	-27.76	-117.22	-24.23	.83	120.46	256.68
6006.00	5.20	326.50	32.00	5983.19	-25.41	-118.86	-27.05	.87	121.55	257.94
6037.00	4.60	332.80	31.00	6014.08	-23.13	-120.21	-29.68	2.60	122.41	259.11
6069.00	4.70	337.80	32.00	6045.97	-20.77	-121.29	-32.28	1.30	123.06	260.28
6100.00	5.10	339.00	31.00	6076.86	-18.31	-122.26	-34.92	1.33	123.63	261.48
6132.00	5.70	338.00	32.00	6108.72	-15.51	-123.37	-37.93	1.90	124.34	262.83
6163.00	6.10	334.30	31.00	6139.55	-12.60	-124.66	-41.11	1.78	125.29	264.23
6195.00	6.20	329.10	32.00	6171.37	-9.58	-126.28	-44.53	1.77	126.65	265.66
6227.00	5.80	322.60	32.00	6203.19	-6.82	-128.15	-47.83	2.46	128.33	266.96
6258.00	5.40	319.20	31.00	6234.05	-4.47	-130.06	-50.76	1.68	130.13	268.03
6290.00	4.90	315.00	32.00	6265.92	-2.36	-132.01	-53.49	1.96	132.03	268.98
6322.00	4.70	309.80	32.00	6297.80	-.56	-133.98	-55.96	1.50	133.98	269.76
6386.00	4.90	299.70	64.00	6361.58	2.48	-138.37	-60.56	1.36	138.39	271.03
6449.00	4.30	293.70	63.00	6424.38	4.76	-142.87	-64.53	1.22	142.95	271.91
6512.00	5.00	282.50	63.00	6487.17	6.30	-147.71	-67.97	1.81	147.85	272.44

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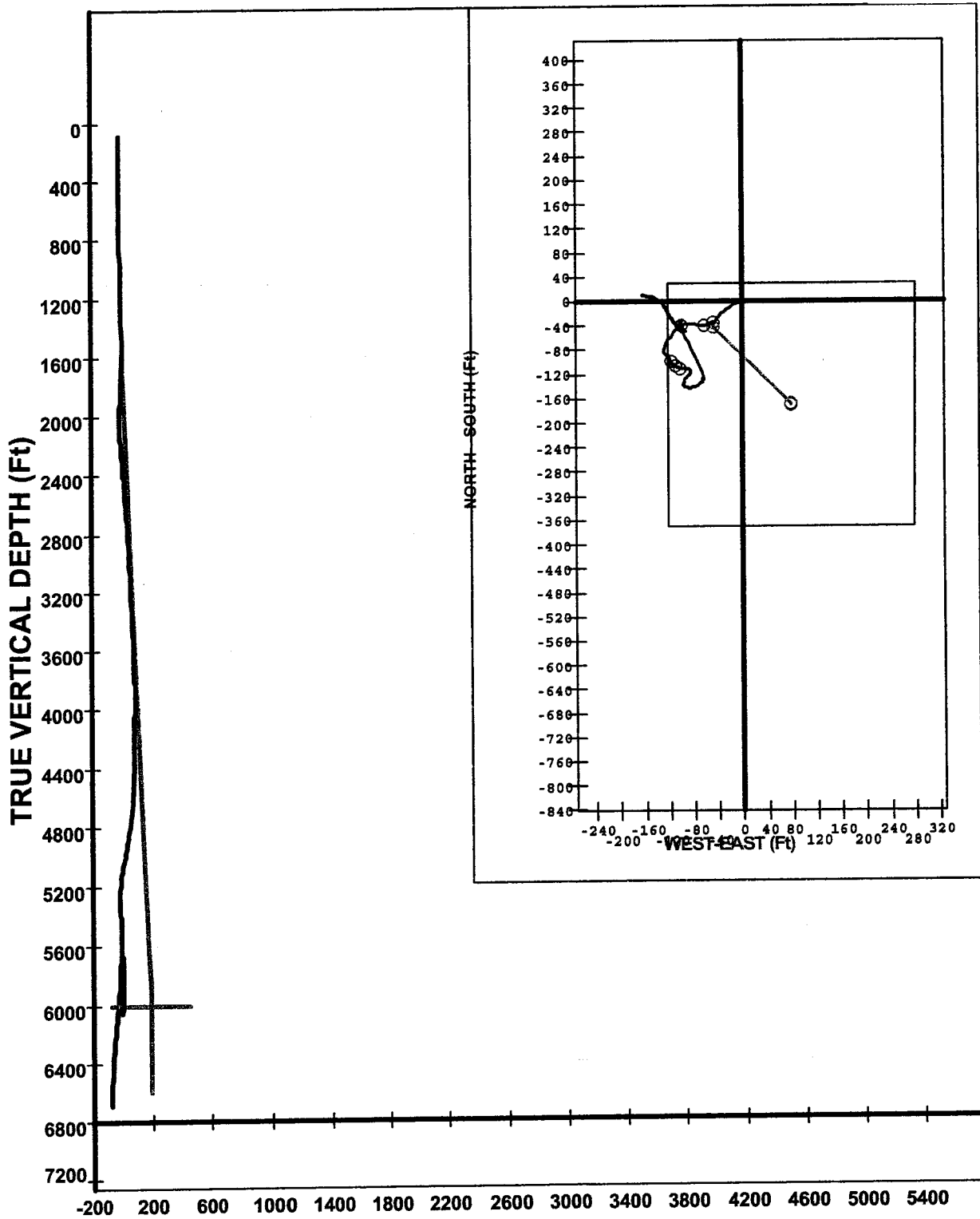
Measured Depth FT	Incl Angle Deg	Drift Direction Deg	Course Length FT	True Vertical Depth	N-S FT	E-W FT	Vertical Section FT	Dogleg Severity Deg/100	C L O S U R E	
									Distance FT	Direction Deg
6576.00	4.70	288.70	64.00	6550.94	7.75	-152.92	-71.47	.94	153.12	272.90
6672.00	5.40	281.80	96.00	6646.57	9.93	-161.07	-76.88	.96	161.37	273.53
6710.00	5.70	280.40	38.00	6684.39	10.64	-164.67	-79.05	.87	165.02	273.70
--Projection to Bit--										
6750.00	6.02	278.93	40.00	6724.18	11.32	-168.70	-81.36	.87	169.08	273.84

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Company: Wolverine Gas And Oil of Utah LLC
Lease/Well: Wolverine Federal # 17-2
Location: Sec 17, T23S, R1W
State/Country: Ut, Seiver



Weatherford



○- Sidetrack △- Control Strait ▽- Control Strait Original

VERTICAL SECTION (Ft) @ 155.08°

REBEL TESTING

Phone: (307) 682-0128

P.O. Box 296
Gillette, WY 82717-0296

CONFIDENTIAL

Operator	Wolverine Gas & Oil Co.		Ticket #	2306	
Address	One Riverfront Plaza, 55 Campau NW				
	Grand Rapids	MI 49503-2616	E-Mail	Fax	
Well Name & No.	Wolverine	Fed. 17-2	DST No.	1	Date 7/29/04 Net P. Pay
Contractor	CCDT	Surface Choke	3/4	Mud Type	Low solids / Salt Polymer
Rig No.	10	Bottom Choke	3/4	Weight	9.9
Spot	SE SW	Hole Size	6 1/4	Viscosity	36
Sec.	17	Ret Hole Size	6 1/4	Water Loss	11.8
Twp.	23 S	D.P. Size & Wt.	3 1/2 IF 13.30	Resistivity	1.5 @ 93 Deg.
Rng.	1 W	Wt. Pipe Size	3 1/2 IF	Ppm. NaCl	2900
Field		I.D. of D.C.		Bottom	
County	Sevier	Length of D.C. above Tool	803'	Hole Temperature	158 Deg.
State	Ut.	Tool Depth	5660		
K.B. Elevation		Type Test	Conventional (csg. Packer)		
Formation	Top Zone	Test Interval	5340 - 5660	Tool opened @	11:40 a.m. Unset @ 3:30 p.m.

Blow:

Open tool @ 11:40 a.m. w/ 6" blow, bottom of bucket in 1 min., 14 oz. in 3 min., 13 oz. in 5 min., 8 oz. in 10 min., 8" in 15 min.
Shut tool @ 11:59 w/ no blow.

Open tool @ 12:30 w/ 7" blow, 5" in 3 min., 4" in 5 min., 2" in 10 min., 1" in 15 min., 1/2" in 20 min., 1/2" in 25 min., surface bubbles in 30 min., weak surface bubbles in 35, 40, 45, 50, 55, & 60 min.
Shut tool @ 1:30 p.m. w/ no blow.

PULL LOOSE @ 3:30 p.m.

TIGHT HOLE

Remarks:

Started @ 7:15 a.m. on 7/29/04
Stopped @ 9:30 p.m. on 7/29/04

Mike,

Please send 4 copies of test to Wolverine- Attn. John Vrona and 1 copy to Steve Hash @ EXACT Engineering Inc. 415 S. Boston Ste. 734 in Tulsa OK. 74103

Cushion	NA	Amount	_____	Fl.	Total Volume of Sample:	2300
Total Fluid Recovered	4600	Fl. Consisting of:	31 Bbls.		Oil:	1850
4600	Fl. of	Gas & Emulsified Mud	Cut Oil		Water:	_____
_____	Fl. of	_____	_____		Mud:	450
_____	Fl. of	_____	_____		Gas:	199
_____	Fl. of	_____	_____		Other:	Grind-out 1%bs, 80%oil, 19%gas
Test was/was not reverse circulated?	_____	WAS	_____		Sample R.W.:	Too oily for accurate reading
Recovery	_____	_____	_____		Gravity:	42 @ 80 Deg.
Top Sample R.W.	Oil- 1% mud, 6% h ₂ o, 60% oil, 33% gas, 42 Grav	_____	_____		Gear/Oil Ratio:	17.2
Middle Sample R.W.	oil- 2% mud, 8% h ₂ o, 60% oil, 30% gas, 42 gravity	_____	_____		Make Up Water R.W.:	7 @ 80 Deg. 650 Ppm Nacl
Bottom Sample R.W.	1.5 @ 100 Deg. 2750 Ppm Nacl	_____	_____			

Type	No.	Clock	Type	No.	Clock	Type	No.	Clock
Type	30108	Clock	Type	13744	Clock	Type		Clock
Cap.	10,000	Loc.	5328	No.	16308	Cap.		Loc.
Inside	X	Outside	Hrs.	24	Inside	X	Outside	
Pres.	Field	Corrected	Pres.	Field	Corrected	Pres.	Field	Corrected
IH	2762		IH	2810		IH		
FH	2727		FH	2785		FH		
IF-1	515		IF-1	809		IF-1		
FF-1	1939		FF-1	1725		FF-1		
IF-2	1753		IF-2	1840		IF-2		
FF-2	2171		FF-2	2221		FF-2		
IF-3			IF-3			IF-3		
FF-3			FF-3			FF-3		
SIP-1	2289		SIP-1	2285		SIP-1		
SIP-2	2397		SIP-2	2413		SIP-2		
SIP-3			SIP-3			SIP-3		

RESERVOIR ANALYSIS? ?

Bob Hammond
Teller

5
No. Final Copies

Steve Hash
WELL OWNERS REPRESENTATIVE (Please print legibly)

CONFIDENTIAL

Gillette WY
Ph (307) 682-9626



REBEL TESTING, INC.

Technical Services
(928) 505-8389

COMPANY WOLVERINE GAS & OIL CO.
LEASE NAME & NO WOLVERINE FEDERAL #17-2
INTERVAL TESTED 5340' - 5860'
"TIGHT HOLE"
COUNTY SEVIER
STATE UTAH
FORMATION TOP ZONE

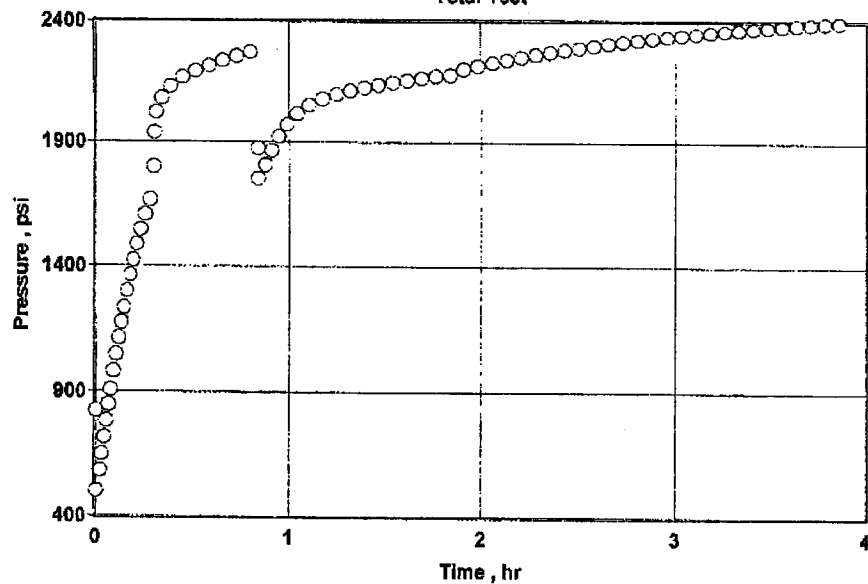
DATE 07-29-2004
TICKET # 2308
TEST # 1

Contractor CDDT Rig No. 10 Spot SE/SW Sec 17 Twp 23 S Rng 1 W Field County Sevier State Utah Elevation Formation Top Zone	Surface Choke 3/4" Bottom Choke 3/4" Hole Size 6 1/4" Core Hole Size DP Size & Wt 3 1/2" 13.30 Wt Pipe ID of DC Length of DC 803' Total Depth 5860' Type of Test Csg Packer Test Interval 5340' - 5860'	Mud Type Low Solids/Polymer Weight 9.9 Viscosity 36 Water Loss 11.8 Filter Cake RW 1.5 @ 93 Deg F 2,871 Ppm B.H.T. 158.4 Co. Rep. Steve Hash Tester Bob Hammond																												
Pipe recovery: Reverse circulated: 4600' Gas & emulsified, mud cut oil = 31.0 bbl. Top grind out: 60% oil, 33% gas, 6% water, 1% mud (gravity 42.0 deg API) Middle grind out: 60% oil, 30% gas, 8% water, 2% mud (gravity 42.0 deg API) Bottom rw: 1.5 @ 100 deg f/2,673 ppm NaCl. Surface blow: Pre-Flow: Began with a 6" blow, increased to bottom of bucket in 1 min, 14.0 oz in 3 min; decreased to 13.0 oz in 5 min, 8.0 oz in 10 min and 8" in 15 min. Final Flow: Began with a 7" blow, decreased to 5" in 3 min, 4" in 5 min, 2" in 10 min, 1" in 15 min, 1/2" in 20 min, surface bubbles in 30 min, weak surface bubbles in 35 min and remained.		Pressure in Sampler 180 psig Volume of Sampler 2650 cc Volume of Sample 2300 cc Oil: 1850 cc Water: 0 cc Mud: 450 cc Gas: 0.199 cu ft Other: 0 Grind out: 80% oil, 19% gas, 1% basic sediment Gas/Oil Ratio 17.2/1 cu.-ft./bbl. Gravity 42.0 API @ 60 Deg F																												
		Gauge Type Sunada Electronic No. 30108 Cap 10000 psi Depth 5328 ft Inside X Outside																												
Downhole Pressure Chart 		Initial Hydrostatic A 2769 Final Hydrostatic K 2728 Initial Flow 1 B 469 Final Flow 1 C 1707 Initial Flow 2 E 1752 Final Flow 2 F 2172 Initial Flow 3 H Final Flow 3 I Shut-in 1 D 2271 Shut-in 2 G 2398 Shut-in 3 J Opened Tool @ 11:40 hrs on 07-29-04 <table border="1"> <thead> <tr> <th></th> <th>Reported</th> <th>Corrected</th> <th></th> </tr> </thead> <tbody> <tr> <td>Flow 1</td> <td>15</td> <td>18</td> <td>min</td> </tr> <tr> <td>Shut-in 1</td> <td>30</td> <td>32</td> <td>min</td> </tr> <tr> <td>Flow 2</td> <td>60</td> <td>61</td> <td>min</td> </tr> <tr> <td>Shut-in 2</td> <td>120</td> <td>121</td> <td>min</td> </tr> <tr> <td>Flow 3</td> <td></td> <td></td> <td>min</td> </tr> <tr> <td>Shut-in 3</td> <td></td> <td></td> <td>min</td> </tr> </tbody> </table>		Reported	Corrected		Flow 1	15	18	min	Shut-in 1	30	32	min	Flow 2	60	61	min	Shut-in 2	120	121	min	Flow 3			min	Shut-in 3			min
	Reported	Corrected																												
Flow 1	15	18	min																											
Shut-in 1	30	32	min																											
Flow 2	60	61	min																											
Shut-in 2	120	121	min																											
Flow 3			min																											
Shut-in 3			min																											



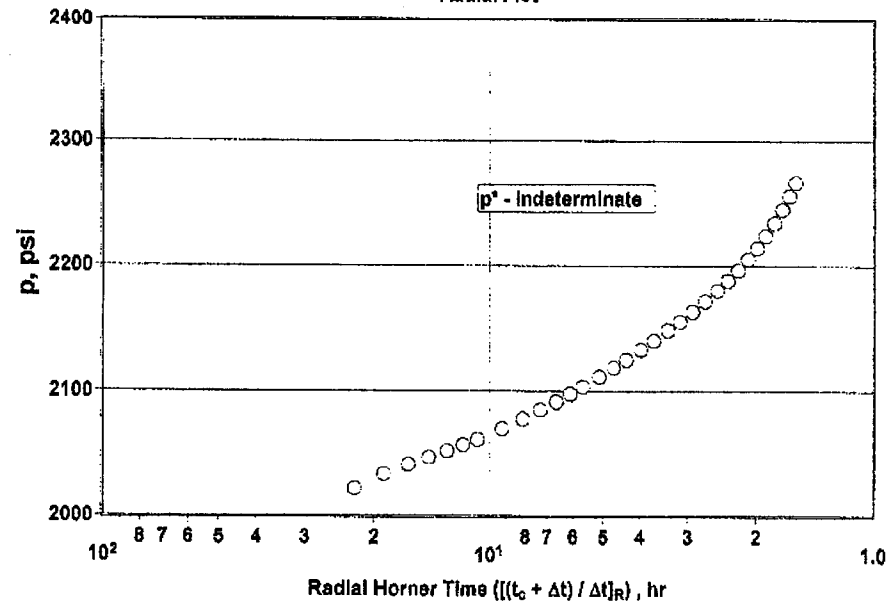
Diagnostic Analysis - Shut in 1

Total Test



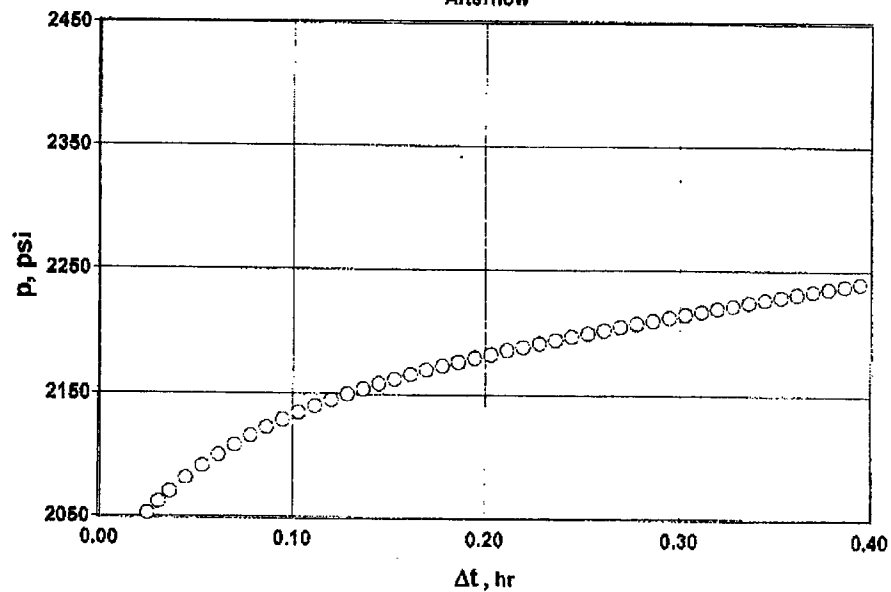
Diagnostic Analysis - Shut in 1

Radial Plot



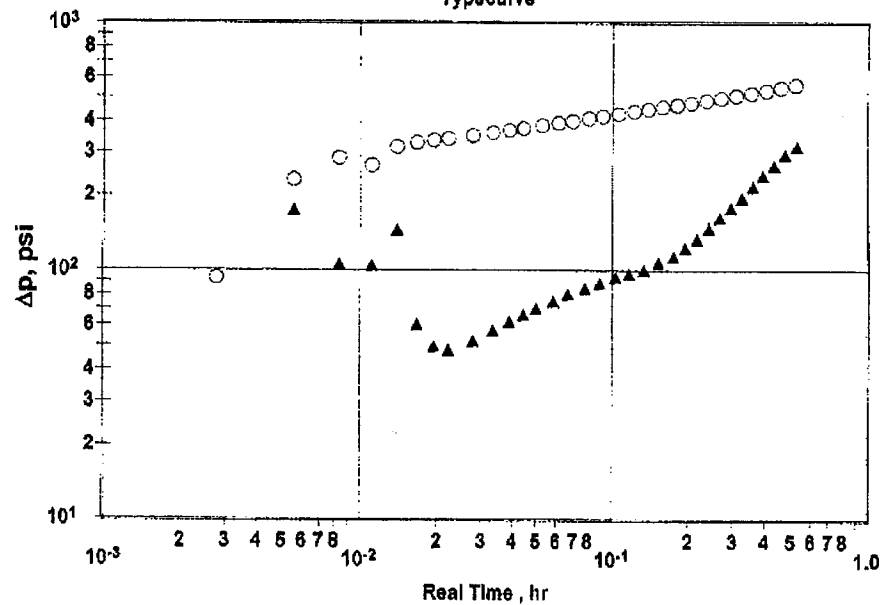
Diagnostic Analysis - Shut in 1

Afterflow



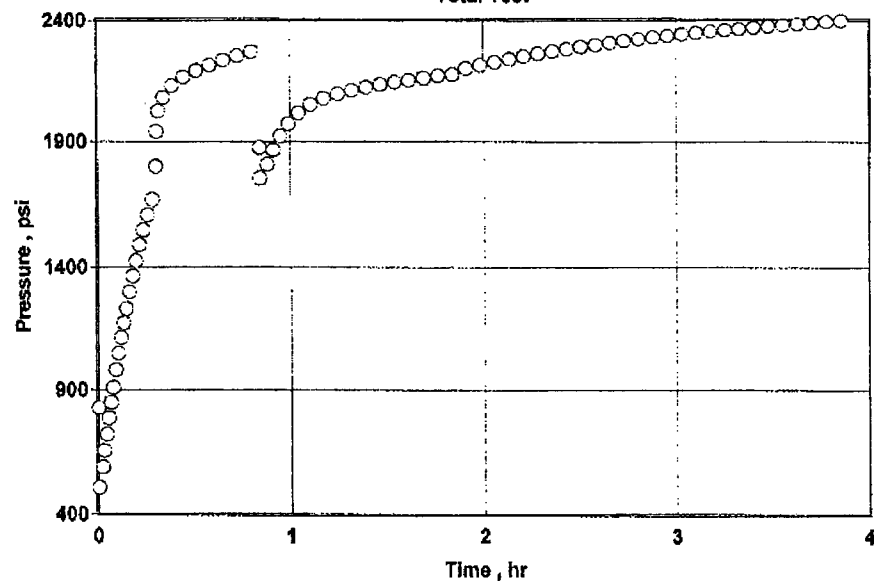
Diagnostic Analysis - Shut in 1

Typecurve



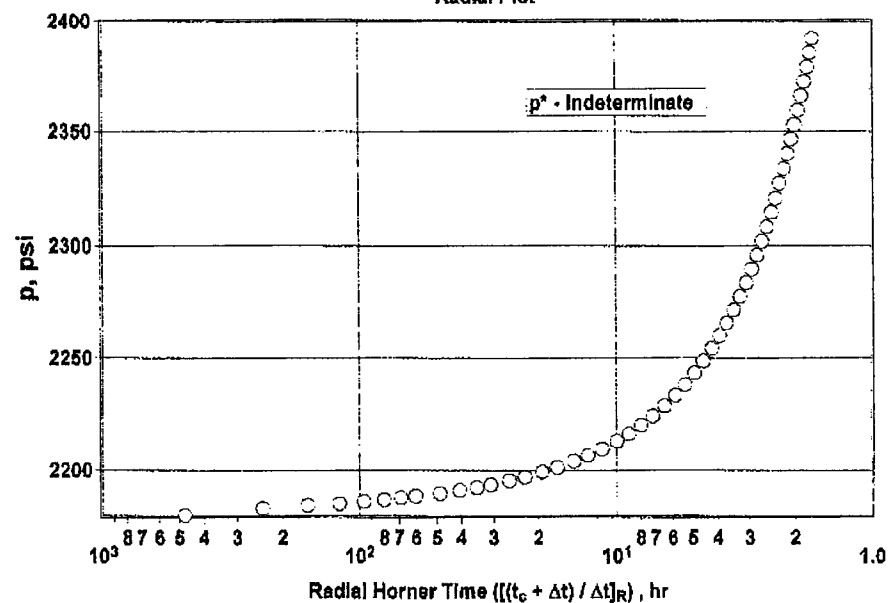
Diagnostic Analysis - Shut In 2

Total Test



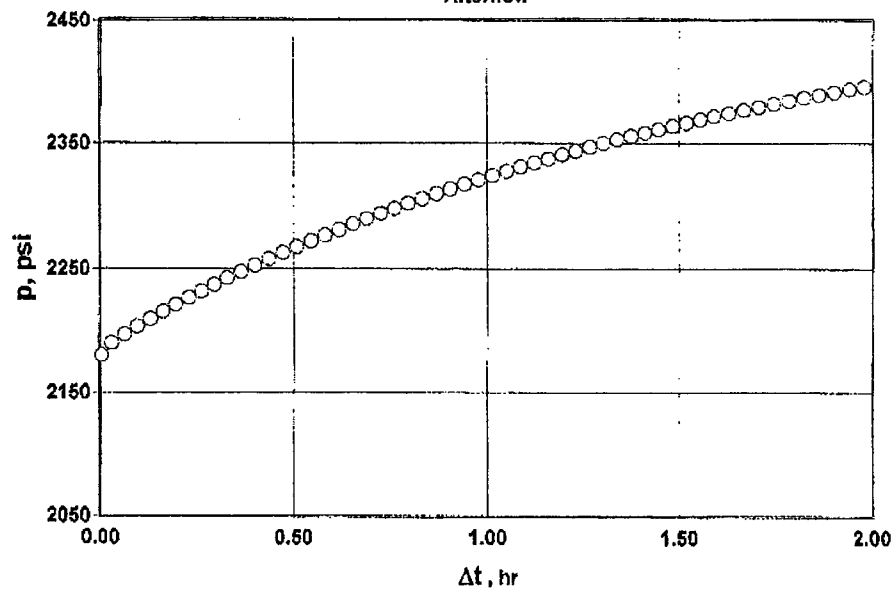
Diagnostic Analysis - Shut In 2

Radial Plot



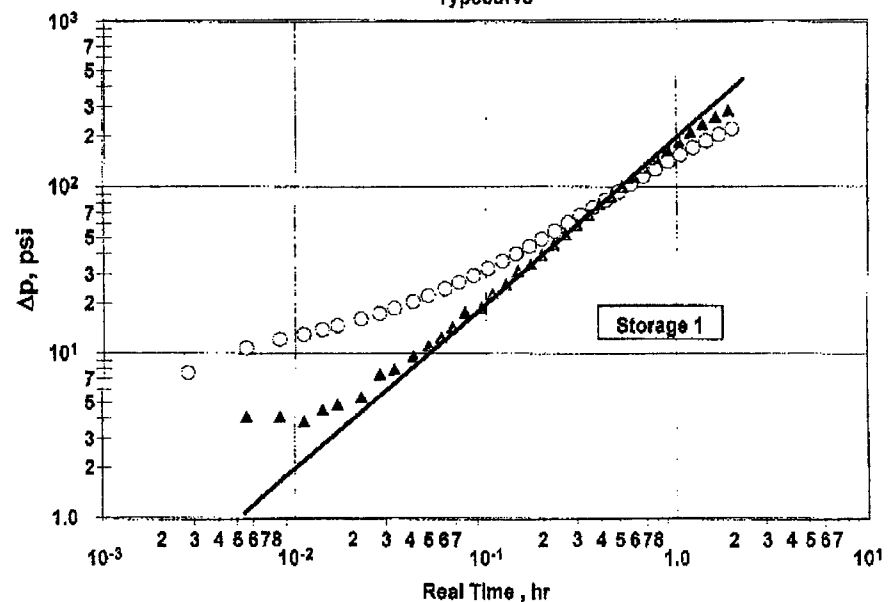
Diagnostic Analysis - Shut In 2

Afterflow

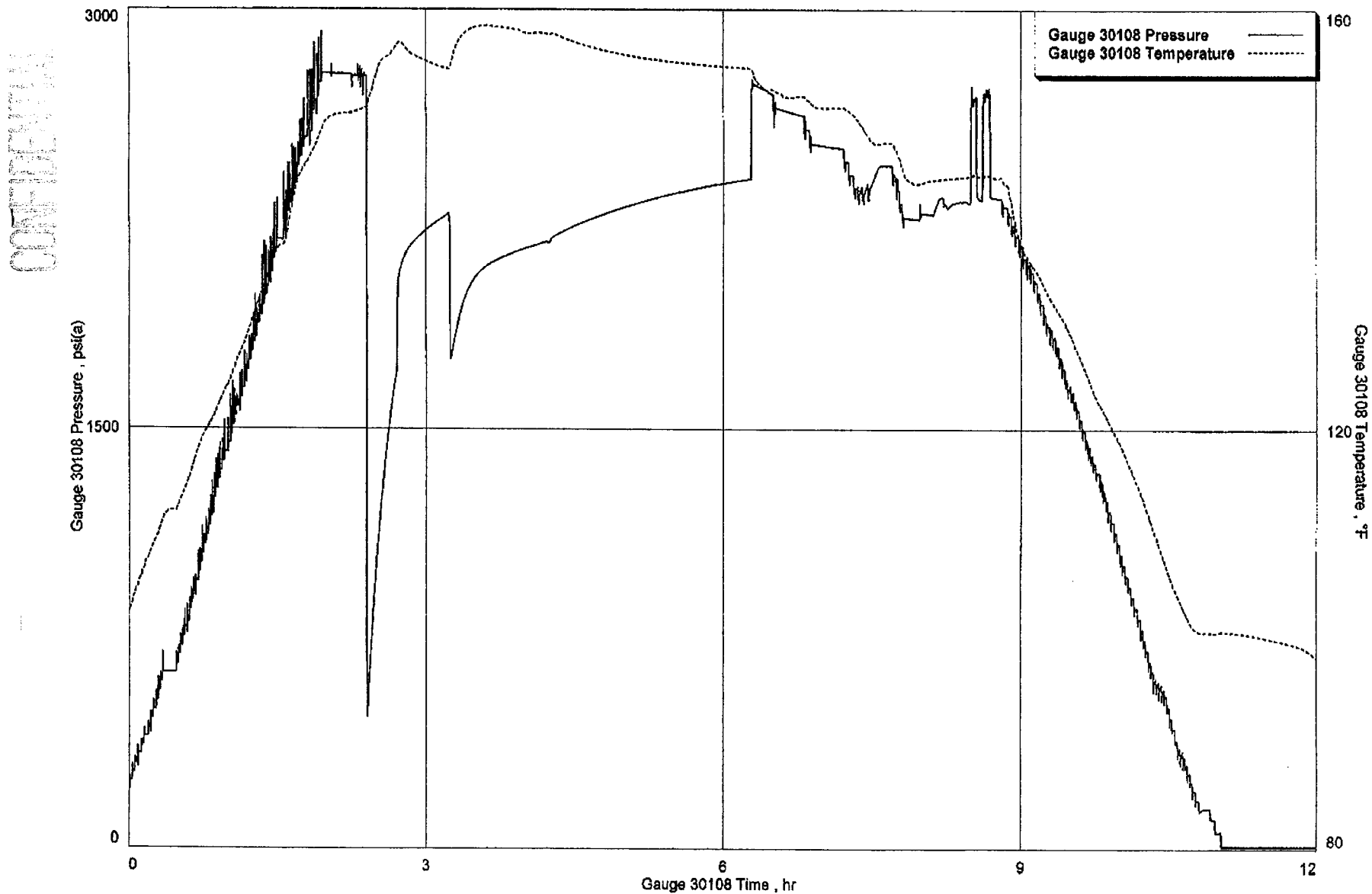


Diagnostic Analysis - Shut In 2

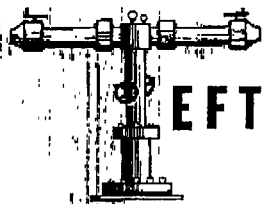
Typecurve



Wolverine Gas & Oil Co
Wolverine Federal 17-2, Dst 1



CONFIDENTIAL



TEFTELLER, INC.

reservoir engineering data

FARMINGTON, NEW MEXICO/
GRAND JUNCTION, COLORADO

P. O. Box 1198
Farmington, New Mexico 87499
(505) 325-1731
Fax (505) 325-1148

2332 Interstate Ave., Ste. A
Grand Junction, CO 81505
(970) 241-0403
Fax (970) 241-7634

October 29, 2004

WOLVERINE GAS & OIL OF UTAH, LLC

One Riverfront Plaza
55 Campau
Grand Rapids, MI 49503-2616

Attention: Mr. Gary Bleeker

Subject: Bottom Hole Sampling and Wireline
Wolverine Federal No. 17-2
Navajo Formation
Sevier County, Utah
File No. 2-52792-BHS&WL

Dear Sir:

Attached hereto are the results of the Bottom Hole Sampling and Wireline Operations conducted on the above captioned wells on October 27, 2004.

The data presented is in tabular and graphical form.

It has been out pleasure to perform these services for you. If we can be of further assistance, please call us at any time.

Respectfully submitted,

Neil Tefteller

TEFTELLER, INC.

NT/mdt

Cc: Mr. Steve Hash; Exact Engineering, Inc.

Serving the Rocky Mountain Area

Form RFL-34

CORE LABORATORIES, INC.
Petroleum Reservoir Engineering
DALLAS, TEXAS

Page _____ of _____

File _____

Company WOLVERINE OIL & GAS CO. UTAH, LLC Date Sampled 10-27-04
Well WOLVERINE FEDERAL #17-2 County SEVIER
Field _____ State UTAH

FORMATION CHARACTERISTICS

Formation Name LOWER NAUJO
Date First Well Completed 10-2004
Original Reservoir Pressure 2632 PSIG @ 6350 Ft.
Original Produced Gas Liquid Ratio 0 SCF/Bbl.
Production Rate 20 BBL/HR. Bbls./Day
Separator Pressure and Temperature _____ PSIG _____ ° F.
Liquid Gravity at 60° F. 42 ° API
Datum _____ Ft. Subsea

WELL CHARACTERISTICS

Elevation 5847 KB
Total Depth 6624 PSIG _____ Ft.
Completion Depth 6318'-8" _____ Ft.
Tubing Size and Depth 2 3/8 In. to 6356 Ft.
Open Flow Potential _____ MMSCF/Day
Last Reservoir Pressure 2632 PSIG @ 6350 Ft.
Date 10-27 10-2004
Reservoir Temperature 188 ° F. @ 6350 Ft.
Status of Well SHUT IN 24 HRS
Pressure Gauge AMERAC

SAMPLING CONDITIONS

Flowing Tubing Pressure SHUT IN 394 PSIG
Flowing Bottom Hole Pressure _____ PSIG
Primary Separator Pressure _____ PSIG
Primary Separator Temperature _____ ° F.
Secondary Separator Pressure _____ PSIG
Secondary Separator Temperature _____ ° F.
Field Stock Liquid Gravity _____ ° API @ 60° F.
Primary Separator Gas Production Rate _____ MSCF/Day
Pressure Base _____ PSIA
Temperature Base _____ ° F.
Compressibility Factor (F_{pv}) _____
Gas Gravity (Laboratory) _____
Gas Gravity Factor (F_g) _____
Liquid Production Rate @ 60° F. _____ Bbls./Day
Primary Separator Gas/Liquid Ratio 0 SCF/Bbl.
or _____ Bbls./MMSCF

Core Laboratories, Inc., Engineer

REMARKS:

BH Samples AFTER BREAKDOWN WELL PRODUCED APPROX. 230-300 BBL.
SHUT IN 24 HRS BEFORE SAMPLING. SHUT OUT 2-4%

CONFIDENTIAL

11/05/2004 16:46 FAX 918 599 9401

EXACT Engineering Inc

003/005

TEFTALLER, INC
 BOTTOM HOLE PRESSURE SURVEYS
 MIDLAND, FARMINGTON,
 TEXAS NEW MEXICO
 GRAND JUNCTION,
 COLORADO

FIELD PV DATA

Company WOLVERINE O&G CO. OF UTAH Well WOLVERINE FED. #17-2Date 10-27-04 Remarks O-GOR NO BUBBLE POINT

BHS NO. 1 BOTTLE NO. _____
 Opening Pressure 350 psig
 Atmospheric Temperature 62 °F

BHS NO. 2 BOTTLE NO. _____
 Opening Pressure 350 psig
 Atmospheric Temperature 63 °F

PUMP READING	NO. TURNS	PRESSURE
0	3	350
1	4	400
1	5	400
1	6	420
1	7	450
1	8	500
1	9	580
1	10	710
1	11	900
1	12	1140
1	13	1380
1	14	1620
1	15	1900
1	16	2140

PUMP READING	NO. TURNS	PRESSURE
0	3	350
1	4	375
1	5	440
1	6	550
1	7	690
1	8	810
1	9	1000
1	10	1220
1	11	1460
1	12	1720
1	13	2000
1	14	2250

CONFIDENTIAL

11/05/2004 16:46 FAX 918 599 9401

EXACT Engineering Inc

004/005

Company: WOLVERINE OIL & GAS CO. OF UTAH
Well: WOLVERINE FEDERAL # 17-2 County: SEVIER
Field: NAVAJO FORMATION State: UTAH
Engineer: NEIL TEFTELLER Date: 10/27/2004
Gauge Type: AMERADA Well Type:
Gauge Range: 0-3000 Test Type: GRADIENT
Gauge Depth: 6350 ft Status: SHUT IN
Serial No.: 44537 File Name: 52792

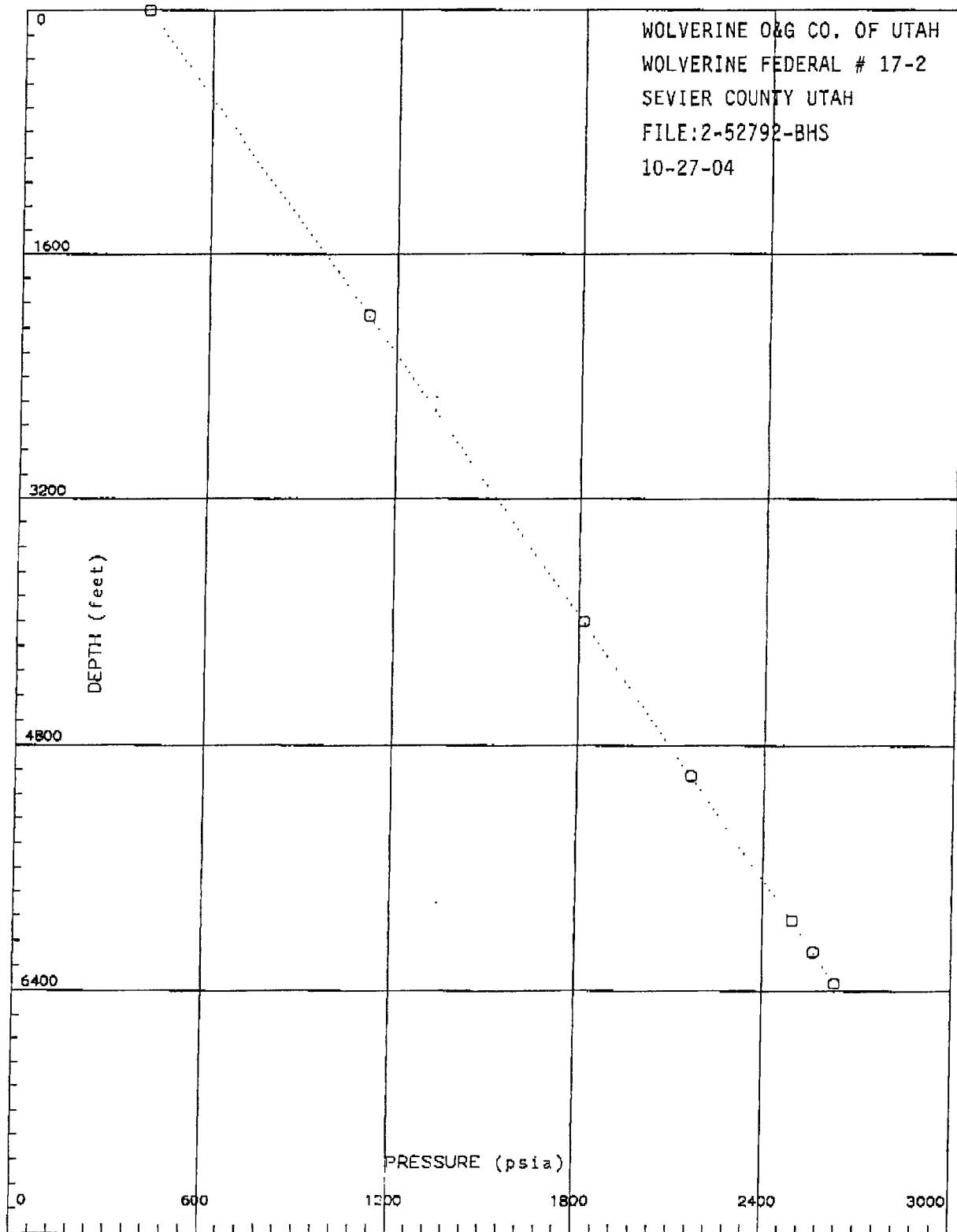
Tubing: 2-3/8" TO 6366' Packer Depth 6356 ft
Tubing: TO
Casing: 4-1/2" TO Oil Level
Perfs.: 6378'-6388' H2O Level
Elevation: 5847' Zero:
Shut-in Time 24 hrs

Shut-in BHP 2632 @ 6350 ft Shut-in BHT 188 F @ 6350 ft
Shut-in WHP 394 Shut-in WHT 0 F

[Tefteller Incorporated]

#	MD	TVD	PRESSURE	PSI/ft
1	0	0	394.00	
2	2000	2000	1109.00	0.357
3	4000	4000	1814.00	0.352
4	5000	5000	2162.00	0.348
5	5950	5950	2494.00	0.349
6	6150	6150	2563.00	0.345
7	6350	6350	2632.00	0.345

FLUID LEVEL @ SURFACE

~~CONFIDENTIAL~~

018

**WOLVERINE GAS AND OIL COMPANY**
of Utah, I.L.C.*Energy Exploration in Partnership with the Environment*

January 31, 2005

State of Utah
Division of Oil, Gas & Mining
1594 West North Temple
Suite 1210
Salt Lake City, UT 84114-5801

Via Fax (801) 359-3940

Re: Approved APD
Wolverine Federal 17-2

To Whom It May Concern:

Wolverine Gas and Oil Corporation of Utah, as operator of the captioned well (API Nos. 43-041-30031), hereby requests copies of the approved Applications to Drill with any conditions for approval for said wells. Please fax them to my attention at (616) 458-0869.

If you have any questions or concerns, please feel free to contact me.

Very truly,

Helene Bardolph

SENT
4-8-05
JAD

RECEIVED

APR 0 / 2005

DIV. OF OIL, GAS & MINING

COPY

235 / W Sec. 17

Form 3160-5
(April 2004)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB No. 1004-0137
Expires: March 31, 2007

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

5. Lease Serial No.
UTU-73528

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.
Wolverine Fed Exploration Unit

8. Well Name and No.
Wolverine Federal #17-2

9. API Well No.
43-041-30031

10. Field and Pool, or Exploratory Area
Exploratory

11. County or Parish, State
Sevier Co, UT

SUBMIT IN TRIPLICATE- Other instructions on reverse side.

1. Type of Well
☒ Oil Well ☐ Gas Well ☐ Other

2. Name of Operator **Wolverine Gas & Oil Co of Utah, LLC**

3a. Address
One Riverfront Plaza, 55 Campau NW, Grand Rapids, MI

3b. Phone No. (include area code)
616-458-1150

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

**SHL: 830' FSL & 1901' FWL
BHL: 841' FSL & 1732' FWL (TD)**

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input type="checkbox"/> Other
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input checked="" type="checkbox"/> Water Disposal	

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

Disposal of Produced Water - Interim Proposal

Produced water will be disposed of by one of the following methods:

- used as drilling fluid for Wolverine Federal wells 17-3, 17-4, 17-5, 8-1 and & KMR 17-6(8-1), KMR 17-7 at SENW Sec 17, T23S, R1W and/or for drilling fluid for Wolverine Federal wells 18-1, 19-1 & 20-1 to be drilled at SESW Sec 17 (this location) OR
 - trucked to a commercial SWD well.
- a. Operator's Field Representative: Kenn Dastrup, Wolverine Gas & Oil, Well Pad "A", 2475 S Hwy 24, Sigurd, UT 84657 (435) 893-0173
b. Source of Produced Water: Navajo formation 6378-6388 & 6310-6334, Wolverine Federal 17-2; Lease No UTU-73528; location shown above
c. Map, quantity to be disposed and water analysis attached.

xc: UDOGM

CONFIDENTIAL

PLEASE MAINTAIN ALL INFORMATION CONTAINED HEREIN CONFIDENTIAL - thank you

COPY

14. I hereby certify that the foregoing is true and correct
Name (Printed/Typed)

Steven R Hash - EXACT Engineering Inc

Title **Consulting Engineer (918) 599-9400**

Signature

Steven R. Hash

Date

06/07/2005

**Accepted by the
Utah Division of
Oil, Gas and Mining
FOR RECORD ONLY**

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Title

Date

Office

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on page 2)

AUG 10 2005

DIV. OF OIL, GAS & MINING

EXACT Engineering, Inc.

www.exactengineering.com

415 S. Boston Ave., Suite 734, Tulsa, OK 74103 • (918) 599-9400 • (918) 599-9401 (fax)

Steven R. Hash, P.E.
Registered Professional Engineer
stevehash@exactengineering.com

August 6, 2005

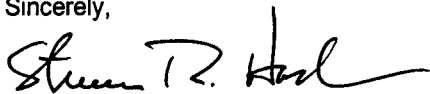
Mr. Al McKee
Bureau of Land Management
Utah State Office
P.O. Box 45155
Salt Lake City, UT 84145-0155

Re: Additional Information to Accompany "Interim Proposal for Produced Water Disposal"
Wolverine Federal 17-2 well
Sec 17 T23S R01W
Sevier Co, UT
API# 43-041-30031
BLM Lease No. UTU-73528

Dear Mr. McKee,

At your request, and on behalf of Wolverine Gas and Oil Company of Utah, LLC, please find enclosed Utah Division of Oil, Gas and Mining approvals for two (2) produced water disposal sites in Uintah County either of which, from time to time, may be utilized by Wolverine to dispose of produced water from the subject well. Please let me know if anything additional is required on our part. We respectfully request that the enclosed information remain confidential.

Sincerely,



Steven R. Hash

Enclosures

Xc: Utah Division of Oil, Gas and Mining, Salt Lake City office, Mr. Dustin Doucet

COPY

Petroleum Engineering Consulting, Personnel & Jobsite Supervision
complete well design, construction & management, drilling, completion, production, pipelines, appraisals,
due diligence, acquisitions, procedures, temporary personnel and field supervision



Dalbo, Inc.

Oil and Water Service

P.O. Box 1168 • Vernal, Utah 84078 • Phone (435) 789-0743

GLEN BENCH
DISPOSAL

DALBO, INC.

**DISPOSAL
FACILITY
APPROVAL
AT
GLEN BENCH**



State of Utah

DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

1584 West North Temple, Suite 1210
PO Box 145801
Salt Lake City, Utah 84114-5801
(801) 538-5340 telephone
(801) 359-3940 fax
(801) 538-7223 TTY
www.nr.utah.gov

Michael O. Leavitt
Governor
Robert L. Morgan
Executive Director
Lowell P. Braxton
Division Director

GLEN BENCH
DISPOSAL

August 20, 2003

Nick Richens
Glen Bench Disposal Facility
P.O. Box 1168
Vernal, Utah 84078

Subject: Final Approval To Operate A Commercial Evaporative Produced Water Disposal Facility,
And Associated Land Farm, Sec. 5 Township 9 South, Range 22 East, Uintah County, Utah.

Dear Mr. Richens,

On November 20, 2002, the Division of Oil, Gas & Mining ("the Division") received your initial submission to construct and operate a produced water disposal facility and associated land farm. The Division published this permit for public notice on March 7, 2003 in the Salt Lake Tribune and in the Deseret News, and on March 5, 2003 in The Vernal Express. There were no public comments received and no formal objections raised by outside parties. Therefore having met all the technical requirements for filing and notice; you are hereby approved as a commercial disposal facility for produced water and oilfield generated nonhazardous exploration and production waste solids. The permit covers Pit #1 & Pit #2, and associated land farming operations of solid wastes.

It is required that minimum of 2 feet of freeboard will be maintained at all times, and that a method of obviously displaying the freeboard for each pit be devised. Spraying water to accelerate evaporation will be closely monitored by your employees and over spray will be eliminated. Over spray outside of the lined pit area is considered an illegal surface discharge, and could result in the closure of the facility. The evaporation pits are to be maintained such that hydrocarbons do not collect on the surface and curtail evaporation. The leak detection system must be checked weekly and its condition documented. In addition Division personnel will conduct periodic visual inspections of the facility and leak detection system. Any leak must be reported to the Division immediately, and corrective measures must be taken. Solid wastes must be treated as set forth in the application and will not be allowed to collect for more than 30 days without being treated. Untreated oily and solid wastes may be subject to full cost bonding if not properly mixed and treatment begun within 30 days after arriving at the facility. The division will determine the amount of the full cost bond in the eventuality that this stipulation is invoked.

Bonding for this facility is due at the time of startup, unless otherwise negotiated with the division. Failure to provide adequate bonding will result in the closure of this facility and restoration of the site to its preconstruction or approved state.

Utah!
Where ideas connect

Nick Richens
Page 2 of 2
August 20, 2003

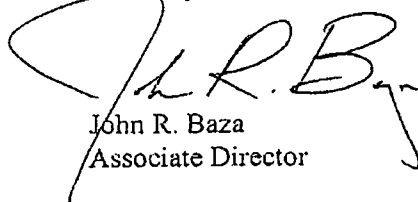
GLEN BENCH
DISPOSAL

The issuance of this permit does not supersede local ordinances, county planning and zoning requirements, or other permits required to conduct business. This facility is not authorized to take any hazardous wastes, and may be subject to UDEQ and EPA laws if wastes of this nature are collected.

Quarterly reports shall be provided to this office that contain a record of the leak detection system inspections, the water volumes received, and the solid waste volumes received at the facility. Failure to report as outlined herein will be considered a violation of the permit.

A copy of the approval should be kept at the field office, and field personnel are to be made aware of the conditions of approval for this permit. Questions concerning the approval can be directed to Brad Hill at (801) 538-5315, or Gil Hunt at (801) 538-5297, in the Salt Lake office.

Sincerely,



John R. Baza
Associate Director

ts

cc: Uintah County Planning Office
David Hackford Roosevelt Office
Richard Powell Tri County Health



Norman H. Bangertter
Governor
Dee C. Hansen
Executive Director
Dianne R. Nielson, Ph.D.
Division Director

DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

355 West North Temple
3 Triad Center, Suite 350
Salt Lake City, Utah 84180-1203
801-538-5340

ACE DISPOSAL

February 25, 1991

Mr. Mike Keele
Ace Disposal Inc.
827 South 1500 West
Vernal, Utah 84078

Dear Mr. Keele:

Re: Approval to Construct Produced Water Disposal Facility, Section 2, Township 6
South, Range 20 East, SLM, Uintah County, Utah

This letter reinstates the approval previously issued to you in our letter dated July 14, 1988, to construct the referenced facility. In addition to the requirements detailed in the July 14, 1988 letter, the Division also requires that a \$10,000.00 bond be furnished to the Division prior to the initiation of any construction activity.

The Division shall be notified as the construction progresses to allow for inspection by Division personnel. Notification shall be given after excavation, prior to installing the leak detection system, and prior to installation of the artificial liner.

This approval does not alleviate the owners of this facility of any responsibility to comply with any other state, local or federal laws or ordinances.

If you have any questions concerning this letter, please contact Brad Hill or Gil Hunt at this office.

Best regards,

Dianne Nielson
Director

BGH/ldc
WUI38



State of Utah
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

ACE DISPOSAL

Michael O. Leavitt
Governor

Ted Stewart
Executive Director

James W. Carter
Division Director

355 West North Temple
3 Triad Center, Suite 350
Salt Lake City, Utah 84180-1203
801-538-5340
801-359-3940 (Fax)
801-538-5319 (TDD)

November 8, 1993

Mike Keele
Ace Oilfield Disposal Inc.
827 South 1500 West
Vernal, Utah 84078

Re: Approval For Use of Produced Water Disposal Pit #3 and
Drilling Mud Disposal Pit #3, Ace Oilfield Disposal Inc.,
Produced Water Disposal Facility, Section 2, Township 6 South,
Range 20 East, Uintah County, Utah

Dear Mr. Keele:

A final inspection has been conducted at the above referenced facility regarding the addition of Produced Water Disposal Pit #3 and Drilling Mud Disposal Pit #3 at the facility. Approval is hereby issued for use of the disposal pits for produced water and drilling mud. This approval does not exempt Ace Oilfield Disposal Inc. from complying with all other federal, state and local rules, regulations and ordinances.

By copy of this letter, we are advising Uintah County of our approval as requested in their letter of September 23, 1993.

If you have any questions concerning this approval, please contact Brad Hill or Gil Hunt at this office.

Sincerely,

A handwritten signature in dark ink, appearing to read 'R.J. Firth'.

R.J. Firth
Associate Director

ldc
cc: Uintah County
J. W. Carter, Director
G. L. Hunt
B. G. Hill

W60



State of Utah

DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

Michael O. Leavitt
Governor

Ted Stewart
Executive Director

James W. Carter
Division Director

355 West North Temple
3 Triad Center, Suite 350
Salt Lake City, Utah 84180-1203
801-538-5340
801-358-3940 (Fax)
801-538-5319 (TDD)

ACE DISPOSAL

August 20, 1996

Mike Keele
Ace Oilfield Disposal Inc.
827 South 1500 West
Vernal, Utah 84078

Re: Approval to Construct - Produced Water Disposal Pits #5-#8,
Ace Oilfield Disposal Facility, Section 2, Township 6 South,
Range 20 East, Uintah County, Utah

Dear Mr. Keele:

Your application to construct additional produced water disposal pits was received on June 12, 1996 and amendments to the application on August 20, 1996. The application has been reviewed by Division staff. The application complies with the requirements for produced water disposal facilities in accordance with Utah Administrative Code R649-9 et al., Oil and Gas General Rules.

Approval to commence construction of the proposed pits is hereby granted. This approval does not exempt you from complying with all other federal, state and local rules and ordinances.

The Division requires that our staff be informed of all phases of construction and be allowed the opportunity for inspection during the construction and installation activities including dike construction, leak detection system emplacement and liner installment.

If you have any questions concerning this approval please contact Brad Hill or Gil Hunt at this office.

Sincerely,

A handwritten signature in dark ink, appearing to read 'R. J. Firth'.

R. J. Firth
Associate Director, Oil and Gas

cc: James W. Carter, Director
Lowell P. Braxton, Deputy Director

Gil Hunt # 801-538-5377
Brad Hill # 801-538-5311

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB No. 1004-0137
Expires: March 31, 2007

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

SUBMIT IN TRIPLICATE- Other instructions on reverse side.

1. Type of Well
☒ Oil Well ☐ Gas Well ☐ Other

2. Name of Operator **Wolverine Gas & Oil Co of Utah, LLC**

3a. Address
One Riverfront Plaza, 55 Campau NW, Grand Rapids, MI

3b. Phone No. (include area code)
616-458-1150

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

SHL: 830' FSL & 1901' FWL

BHL: 841' FSL & 1732' FWL (TD)

5. Lease Serial No.
UTU-73528

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.
Wolverine Fed Exploration Unit

8. Well Name and No.
Wolverine Federal #17-2

9. API Well No.
43-041-30031

10. Field and Pool, or Exploratory Area
Exploratory

11. County or Parish, State
Sevier Co, UT

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input type="checkbox"/> Other
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input checked="" type="checkbox"/> Water Disposal	

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

Disposal of Produced Water - Permanent Proposal

Produced water will be disposed of by a combination of the following methods:

1. Trucked to a water containment pit in section 8, T23S R01W, authority presently applied for with UDOGM and operational by August 2005
2. Trucked to a company owned SWD well to be located in section 8, T23S R01W, APD applied for with UDOGM
3. Trucked to a commercial SWD well

a. Source of Produced Water: Navajo formation 6378-6388 & 6310-6334, Wolverine Federal 17-2; Lease No UTU-73528; location shown above
c. Map, quantity to be disposed and water analysis attached.

xc: UDOGM

PLEASE MAINTAIN ALL INFORMATION CONTAINED HEREIN CONFIDENTIAL - thank you

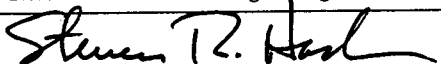
**Accepted by the
Utah Division of
Oil, Gas and Mining
FOR RECORD ONLY**

14. I hereby certify that the foregoing is true and correct
Name (Printed/Typed)

Steven R Hash - EXACT Engineering Inc

Title **Consulting Engineer (918) 599-9400**

Signature



Date

06/07/2005

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Title

Date

Office

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on page 2)

Wolverine Federal 17-2
SE SW Sec 17, T23S R01E
Sevier Co, UT
API# 43-041-30031
UTU-73528

Attachment to Sundry Notice (form 3160-5) for
Interim Proposal for Produced Water Disposal

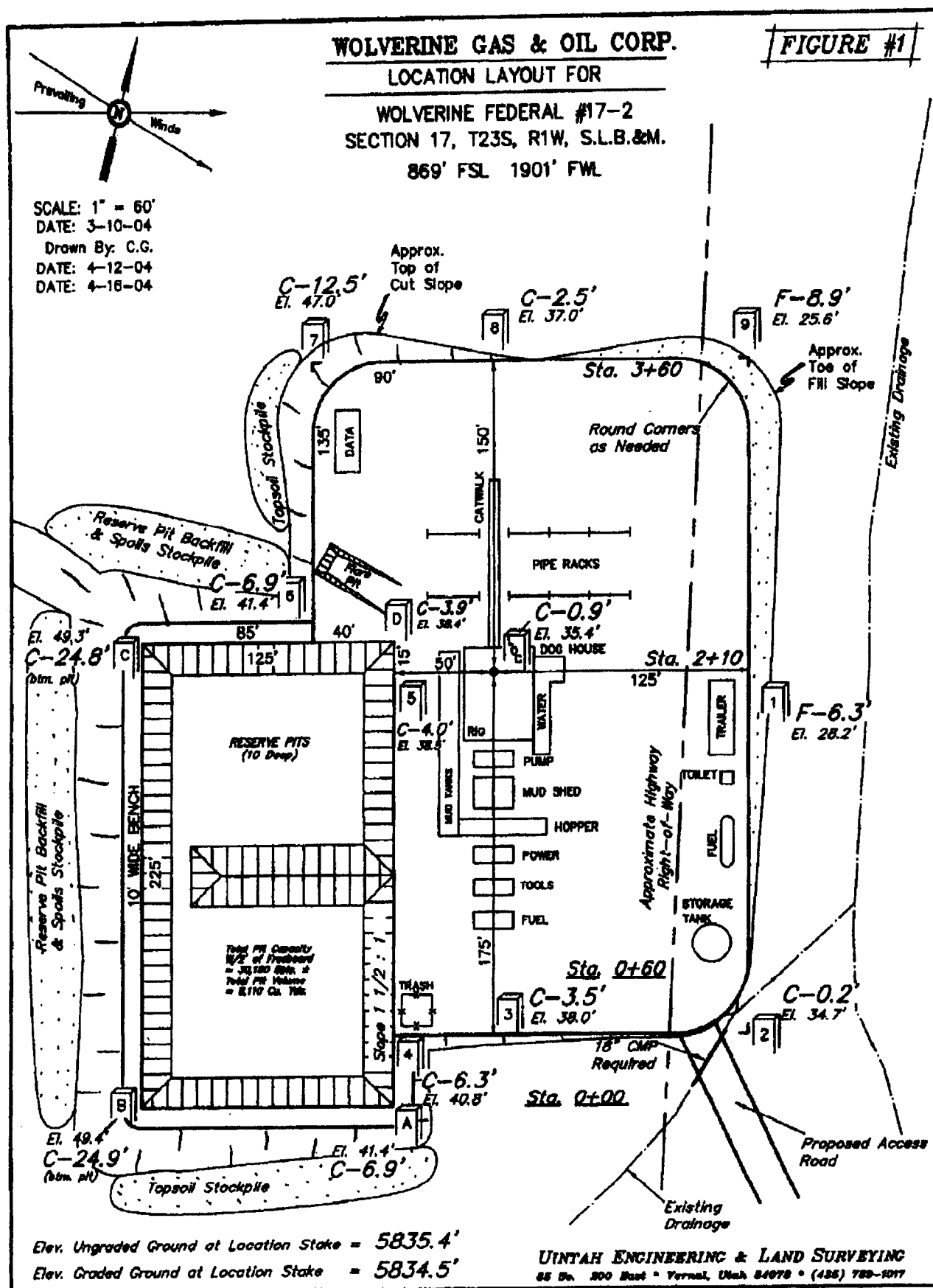
Quantity of Produced Water

March 2005	4075 barrels
April 2005	4797 barrels
May 2005	5592 barrels

Comments:

Presently, the Wolverine Federal 17-2 (SE SW Sec 17) produces into Wolverine's temporary production facility (through an approximate ½ mile long flowline) located in the SE NW Sec 17 and known as pad A. Here, the produced fluid is separated in the pad A treater facility and the water is commingled with other produced fluid from Wolverine's Kings Meadow Ranches 17-1 well (located at pad A) and the mixture is stored in tanks at the pad A location. Periodically, the stored water is transported to the drill rig at pad A (drilling since December 1, 2004) where it is used as a drilling fluid for the Wolverine Federal wells 17-3, 17-4, 17-5 and 8-1 and the KMR 17-6 (WF 8-1) and KMR 17-7 wells. Excess produced water is occasionally transported by truck back to the Wolverine Federal 17-2 well and placed in the drilling reserve pit there for future use as a drilling fluid. This is an unlined pit with a 12 mil plastic liner and no leak detection. Such use for drilling is anticipated to begin on or about July 1, 2005 at which time drilling will resume on the Wolverine Federal 17-2 location for wells 18-1, 19-1 and 20-1. Once drilling is complete the produced water will be either 1) injected into an approved disposal well (presently applied for) 2) disposed of in an approved lined pit facility (presently applied for) or 3) trucked to an approved commercial SWD facility.

June 8, 2005



WOLVERINE GAS & OIL CORP.**TYPICAL CROSS SECTIONS FOR**

WOLVERINE FEDERAL #17-2
SECTION 17, T23S, R1W, S.L.B.&M.

869' FSL 1901' FWL

FIGURE #2

1" = 40'

X-Section
Scale

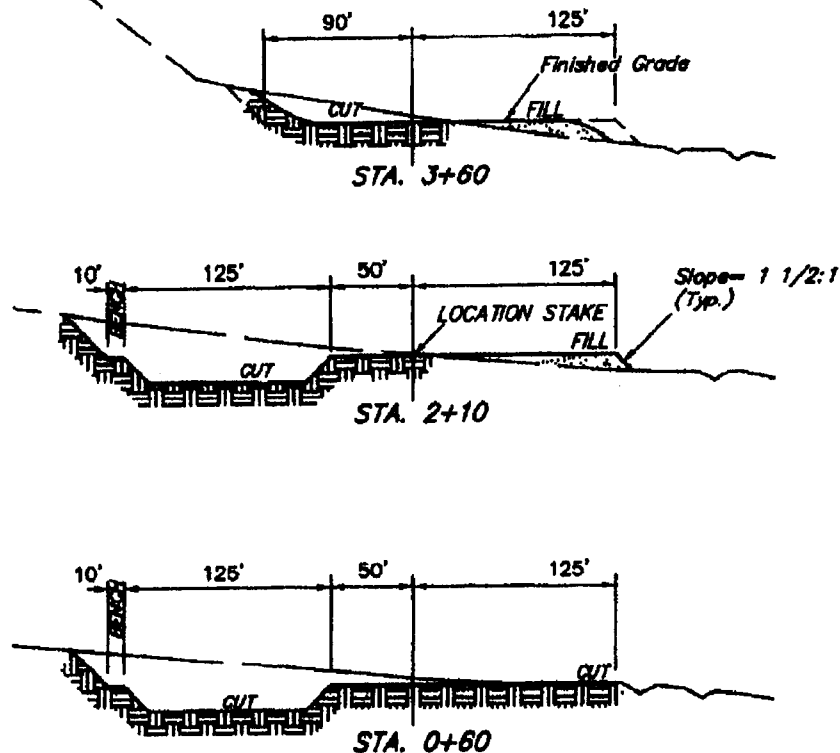
1" = 100'

DATE: 3-10-04

Drawn By: C.G.

DATE: 4-12-04

DATE: 4-16-04

Preconstruction
Grade**NOTE:**

Topsoil should not be
 Stripped Below Finished
 Grade on Substructure Area.

STA. 0+00

APPROXIMATE YARDAGES

CUT
 (6") Topsoil Stripping = 2,240 Cu. Yds.
 Remaining Location = 25,900 Cu. Yds.
TOTAL CUT = 28,140 CU.YDS.
FILL = 4,980 CU.YDS.

*** NOTE:**
 FILL QUANTITY INCLUDES
 5% FOR COMPACTION

EXCESS MATERIAL = 23,160 Cu. Yds.
Topsoil & Pit Backfill = 6,300 Cu. Yds.
 (1/2 Pit Vol.)
EXCESS UNBALANCE = 16,860 Cu. Yds.
 (After Rehabilitation)

UINTAH ENGINEERING & LAND SURVEYING
 85 So. 200 East • Ferris, Utah 84708 • (435) 788-1077

02/02/2005 15:20 FAX 918 599 9401

EXACT Engineering Inc

004/004

FEB. 2.2005 12:10PM OILAB INC

NO.780 P.1/4

Environmental Services
Petroleum Laboratory
Gas Engineering
www.oilab.com

5120 N. Santa Fe
Oklahoma City, OK 73118
Ph. (405) 528-TEST(9378)
Fax (405) 962-1870



LABORATORY REPORT NUMBER 93601
02/02/2005
WATER ANALYSIS

WOLVERINE GAS & OIL CO.
SEVIER CO/UTAH

COMPANY: EXACT ENGINEERING, INC.
LEASE: KMR 17-1
LOCATION: SEVIER CO/UTAH

DATE SAMPLED: 1/21/2005
DATE ANALYZED: 1/31/2005
SAMPLED BY: WOLVERINE
RECEIVED FROM: WOLVERINE GAS & OIL


COLOR (BEFORE FILTRATION): LIGHT BROWN
COLOR (AFTER FILTRATION): COLORLESS

*****CHEMICAL CHARACTERISTICS*****

	mg/L
CALCIUM	425
MAGNESIUM	40.8
SODIUM	10,080
POTASSIUM	220
BARIUM	TRACE
IRON	12
SILICA	48
BICARBONATE*	518
CARBONATE**	0
HYDROXIDE	0
SULFATE	3,000
CHLORIDE	14,100
*(AS CaCO3)	425
** (AS CaCO3)	0

TOTAL HARDNESS (AS CaCO3) 1,240
P ALKALINITY (AS CaCO3) 0
M ALKALINITY (AS CaCO3) 425
SPEC. GRAVITY @ 67 °F 1.0208

RESISTIVITY @ 77°F 0.281
TOTAL DISSOLVED SOLIDS 28,400
pH VALUE 6.45


CERTIFIED BY: SURESH JOSHI
CHEMIST/ANALYST

FAX: 918-599-9401 STEVEN HASH

02/02/2005 15:20 FAX 918 599 9401

EXACT Engineering Inc

003/004

FEB. 2.2005 12:10PM OILAB INC

NO.788 P.2/4

Environmental Services
Petroleum Laboratory
Gas Engineering
www.oilab.com

5120 N. Santa Fe
Oklahoma City, OK 73118
Ph. (405) 528-TEST(8378)
Fax (405) 982-1870



LABORATORY REPORT NUMBER 93601
02/02/2005
WATER ANALYSIS

WOLVERINE GAS & OIL CO.
SEVIER CO/UTAH

COMPANY: EXACT ENGINEERING, INC.
LEASE: WF 17-2
LOCATION: SEVIER CO/UTAH

DATE SAMPLED: 1/21/2005
DATE ANALYZED: 1/31/2005
SAMPLED BY: WOLVERINE
RECEIVED FROM: WOLVERINE GAS & OIL


COLOR (BEFORE FILTRATION): LIGHT BROWN
COLOR (AFTER FILTRATION): COLORLESS

*****CHEMICAL CHARACTERISTICS*****

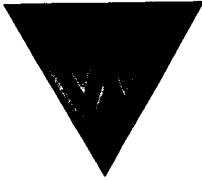
	mg/L
CALCIUM	640
MAGNESIUM	216
SODIUM	8,140
POTASSIUM	900
BARIUM	TRACE
IRON	195
SILICA	96
BICARBONATE*	134
CARBONATE**	0
HYDROXIDE	0
SULFATE	2,875
CHLORIDE	12,935
*(AS CaCO ₃)	110
** (AS CaCO ₃)	0

TOTAL HARDNESS (AS CaCO₃) 2,500
P ALKALINITY (AS CaCO₃) 0
MALKALINITY (AS CaCO₃) 110
SPEC. GRAVITY @ 67 °F 1.0207

RESISTIVITY @ 77°F 0.279
TOTAL DISSOLVED SOLIDS 26,035
pH VALUE 5.86


CERTIFIED BY: SURESH JOSHI
CHEMIST/ANALYST

FAX: 918-599-9401 STEVEN HASH



WOLVERINE GAS AND OIL COMPANY
of Utah, LLC

Energy Exploration in Partnership with the Environment

REVISED

August 8, 2005

Ms. Terry Catlin
Chief, Branch of Fluid Minerals
United States Department of the Interior
Bureau of Land Management
Utah State Office
P.O. Box 45155
Salt Lake City, UT 84145-0155

Re: Review of Operations
October 27, 2004 to March 1, 2005
Plan of Development
March 1, 2005 to March 1, 2006

Approved Effective 8-18-2005

Michael J. Cantor
Petroleum Engineer
Bureau of Land Management

BLM-UT-050
2005 AUG 18 AM 9:37

Dear Ms. Catlin:

Submitted herewith for your approval is a Review of Operations for the time period of October 27, 2004 to March 1, 2005 and a Plan of Development for the time period of March 1, 2005 to March 1, 2006 for the Wolverine Unit (UTU80800X). This letter supersedes and is in lieu of that previously submitted letter dated February 22, 2005.

REVIEW OF OPERATIONS
October 27, 2004 to March 1, 2005

CONFIDENTIAL
RECEIVED
AUG 22 2005
DIV. OF OIL, GAS & MINING

The Wolverine Federal 17-2 well was spud on July 2, 2004 and completed on November 1, 2004. The well was drilled to a depth of 6,724 feet (TVD) which adequately tested the Navajo formation. A temporary above-ground flow line has been laid to the Kings Meadow Ranches 17-1 facility.

The Wolverine Federal 17-2 well has been determined by the BLM to be a "well capable of producing unitized substances in paying quantities". The PA has been revised and is now described as the W/2 of Section 17, T23S, R1W, Sevier County, Utah. The BLM approved the revised PA on November 24, 2004, effective November 1, 2004 (See Exhibit "A").

Ms. Terry Catlin
 Chief, Branch of Fluid Minerals
 August 8, 2005
 Page 2

The sales from the Kings Meadow Ranches 17-1 well were 181,344 barrels from May 12, 2004 to January 31, 2005. The sales for the Wolverine Federal 17-2 well were 27,991 barrels from November 24, 2004 to January 31, 2005.

The Wolverine Federal 17-3 was spud on December 10, 2004 from a surface location described as 1,680' FNL and 2,233' FWL (NENW) of Section 17, T23S, R01W, Sevier County, Utah. The well was drilled to a bottom hole location (BHL) described as 2,013' FSL & 435' FWL of Section 17.

The Wolverine Federal 17-4 was spud on January 31, 2005 and drilled to a bottom hole location described as 2,109' FSL & 1,932' FEL (NWSE) of Section 17, T23S, R01W, from a surface location described as 1,680' FNL & 2,249' FWL of Section 17.

The Wolverine Federal 17-5 was spud on March 14, 2005 and drilled to a bottom hole location described as 1,361' FNL & 1,034' FEL of Section 17, T23S, R01W, from a surface location described as 1,680' FNL & 2,281' FWL of Section 17. The Wolverine Federal 17-3, 17-4 and 17-5 wells will be completed after all the wells permitted on the same pad have been drilled.

Wolverine has applied for and received permits for the following wells (See Exhibit "B"):

Well	State	County	Bottom Hole Location	Sec.	Town	Range	Qtr/Qtr
WOLVERINE FEDERAL 8-1	UT	Sevier	232' FSL & 99' FEL	8	23-S	01-W	SESE
WOLVERINE FEDERAL 18-1	UT	Sevier	175' FSL & 200' FEL	18	23-S	01-W	SESE
WOLVERINE FEDERAL 19-1	UT	Sevier	1,216' FNL & 940' FEL	19	23-S	01-W	NENE
WOLVERINE FEDERAL 20-1	UT	Sevier	695' FNL & 617' FWL	20	23-S	01-W	NWNW
WOLVERINE FEDERAL 17-6 (WF 8-1)	UT	Sevier	2,458' FEL & 721' FNL	17	23-S	01-W	NWNE
KINGS MEADOW RANCHES 17-7	UT	Sevier	1,113' FWL & 2,254' FNL	17	23-S	01-W	SWNW

Wolverine decided not to drill the Wolverine State 16-1 as outlined in the initial plan of unit development. Instead, Wolverine changed the name to the Wolverine Federal 8-1. The Wolverine Federal 8-1 was spud on April 16, 2005 and drilled to 7,824 feet, a depth sufficient to test the Navajo formation. However, the Navajo was not encountered and the 8-1 was plugged back to 2,500 feet. Wolverine requested and was granted permission to use the top portion of the 8-1 well to drill the Wolverine Federal 17-6 (WF 8-1). The Wolverine Federal 17-6 (WF 8-1) was spud on May 15, 2005 and was drilled to the bottom hole location described above. The original Kings Meadow Ranches 17-6, which had been permitted and approved, was renamed the Kings Meadow Ranches 17-7 and spud on June 1, 2005. This well was drilled to the bottom hole location also described above.

The Wolverine Federal 19-1 well was spud on June 30, 2005 at a surface location described as 798' FSL & 1,937' FWL of Section 17, T23S, R01W, and will be drilled to a bottom hole location described as 1,216' FNL & 940' FEL of Section 19, T23S, R01W.

Wolverine is in the process of applying for permits for the wells described below:

Well	State	County	Bottom Hole Location	Sec.	Town	Range	Qtr/Qtr
WOLVERINE FEDERAL 19-2	UT	Sevier	2,177' FEL & 2,292' FNL	19	23-S	01-W	SWNE
WOLVERINE FEDERAL 19-3	UT	Sevier	294' FEL & 2,633' FNL	19	23-S	01-W	NESE
WOLVERINE STATE TWIST CANYON 16-1	UT	Sevier	660' FSL & 2,000' FEL	16	21-S	01-E	SWSE
WOLVERINE FEDERAL TWIST CANYON 21-1	UT	Sevier	660' FWL & 2,019' FNL	21	21-S	01-E	SWSE
WOLVERINE ARAPIEN VALLEY 26-1	UT	Sanpete	161' FNL & 1,224' FEL	26	20-S	01-E	NENE
WOLVERINE FEDERAL ARAPIEN VALLEY 24-1	UT	Sanpete	2,069L' FWL & 460' FNL	24	20-S	01-E	NENW

Ms. Terry Catlin
Chief, Branch of Fluid Minerals
August 8, 2005
Page 4

PLAN OF DEVELOPMENT
March 1, 2005 to March 1, 2006

In addition to the development outlined above that has occurred since March 1, 2005, Wolverine plans the following development of the Unit area through March 1, 2006:

The Wolverine Federal 20-1 well will be drilled after the 19-1 at a surface location described as 845' FSL & 1,922' FWL of Section 17, T23S, R01W, to a bottom hole location described as 695' FNL & 617' FWL of Section 20, T23S, R01W.

The Wolverine Federal 18-1 well will be drilled after the 20-1 at a surface location described as 833' FSL & 1,925' FWL of Section 17, T23S, R01W, to a bottom hole location described as 175' FSL & 200' FEL of Section 18, T23S, R01W.

Wolverine will permit and drill the Wolverine State Twist Canyon 16-1 well as the second Public Interest Well in accordance with the Wolverine Unit Agreement (UTU80800X) in the second half of 2005. The well will be drilled after the 18-1 at a surface location described as 880' FWL & 2,561' FNL of Section 16, T21S, R1E to a bottom hole location described as 660' FSL & 2,000' FEL of Section 16.

Wolverine will permit and possibly drill the Wolverine Arapien Valley 24-1 well after the Twist Canyon 16-1 as the third Public Interest Well in accordance with the Wolverine Unit Agreement (UTU80800X) in the second half of 2005. The well will be drilled at a surface location described as 696' FWL & 2,358' FNL of Section 24, T20S, R1E to a bottom hole location described as 2,069' FWL & 1,160' FNL of Section 24.

The Wolverine Federal 19-2 and Federal 19-3 may or may not be drilled depending on the outcome of the 18-1, 19-1 and 20-1 wells. If drilled, the 19-2 will be drilled after the Twist Canyon 16-1 at a surface location described as 2,165 FWL & 1,176 FSL of Section 19, T23S, R01W, to a bottom hole location described as 2,177' FEL & 2,292' FNL of Section 19, T23S, R01W, and the Wolverine Federal 19-3 well will drilled be at a surface location described as 2,169' FWL & 1,160' FSL of Section 19 to a bottom hole location described as 294' FEL & 2,635' FSL of Section 19.

Wolverine is also in the process of applying for the permit to drill a salt water disposal (SWD) well. The SWD well will be drilled on the facility site described below with a surface location described as 1,140' FSL & 30' FWL of Section 8 and to a depth of 9,500 feet. The disposal zone will be the Navajo formation.

Wolverine has begun the construction of a Central Production Facility in part of the SWSW of Section 8, T23S, R01W, and the SESE of Section 7, T23S, R01W, Sevier County, Utah. The facility will handle between 5,000 and 10,000 barrels of oil per day.

Ms. Terry Catlin
Chief, Branch of Fluid Minerals
August 8, 2005
Page 5

Wolverine will shoot a 155 mile seismic program over the Wolverine Unit in the summer of 2005 (See Exhibit "C").

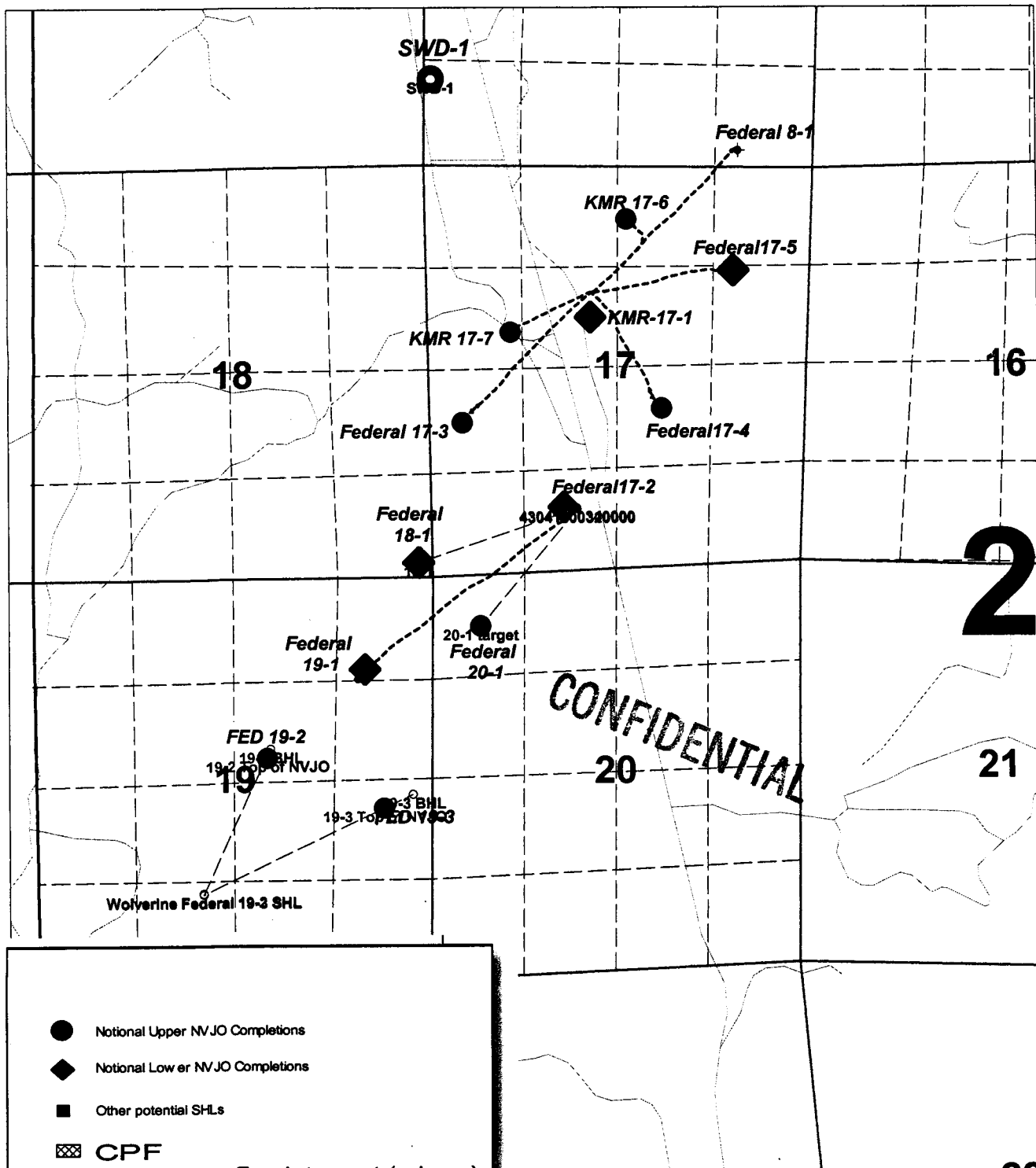
Please keep this letter and all of the enclosures confidential. If you have any questions or need any additional information, please don't hesitate to contact the undersigned.

Very truly,

A handwritten signature in black ink, appearing to read "Richard D. Moritz". The signature is fluid and cursive, with a large, stylized "R" and "M".

Richard D. Moritz
Vice President Land

CONFIDENTIAL



- Notional Upper NVJO Completions
- ◆ Notional Lower NVJO Completions
- Other potential SHLs

CPF

SHL

Fm. Intercept (subsea)

▲ NVJO

● TCRK

BHL

----- Directional wellpath

1:24000

1 inch = 2000 feet

0 660 1320 1980 ft

	Wolverine Gas & Oil Company of Utah, LLC (Operator) <i>Energy Exploration in Partnership with the Environment</i> ONE SUBSEQUENT PLAZA 55 CAMP AVE, N.W. GRAND RAPIDS, MI 49503-2616 (616) 485-1100
	Well Development Covenant Field T23S-R1W Sevier County, UT
Date: 10 August, 2003	gmap: ml covenant base2 by: jn

31. INITIAL PRODUCTION

INTERVAL A (As shown in item #26)

DATE FIRST PRODUCED:		TEST DATE:		HOURS TESTED:		TEST PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	PROD. METHOD:
CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	INTERVAL STATUS:

INTERVAL B (As shown in item #26)

DATE FIRST PRODUCED:		TEST DATE:		HOURS TESTED:		TEST PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	PROD. METHOD:
CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	INTERVAL STATUS:

INTERVAL C (As shown in item #26)

DATE FIRST PRODUCED:		TEST DATE:		HOURS TESTED:		TEST PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	PROD. METHOD:
CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	INTERVAL STATUS:

INTERVAL D (As shown in item #26)

DATE FIRST PRODUCED:		TEST DATE:		HOURS TESTED:		TEST PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	PROD. METHOD:
CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	INTERVAL STATUS:

32. DISPOSITION OF GAS (Sold, Used for Fuel, Vented, Etc.)

33. SUMMARY OF POROUS ZONES (Include Aquifers):

Show all important zones of porosity and contents thereof: Cored intervals and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures and recoveries.

34. FORMATION (Log) MARKERS:

Formation	Top (MD)	Bottom (MD)	Descriptions, Contents, etc.	Name	Top (Measured Depth)

35. ADDITIONAL REMARKS (Include plugging procedure)

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records.

NAME (PLEASE PRINT)

John P Vrona

TITLE

Mag Geology

SIGNATURE

John P Vrona

DATE

12-28-05

This report must be submitted within 30 days of

- completing or plugging a new well
- drilling horizontal laterals from an existing well bore
- recompleting to a different producing formation
- reentering a previously plugged and abandoned well
- significantly deepening an existing well bore below the previous bottom-hole depth
- drilling hydrocarbon exploratory holes, such as core samples and stratigraphic tests

* ITEM 20: Show the number of completions if production is measured separately from two or more formations.

** ITEM 24: Cement Top – Show how reported top(s) of cement were determined (circulated (CIR), calculated (CAL), cement bond log (CBL), temperature survey (TS)).

Send to: Utah Division of Oil, Gas and Mining
1594 West North Temple, Suite 1210
Box 145801
Salt Lake City, Utah 84114-5801

Phone: 801-538-5340

Fax: 801-359-3940

CONFIDENTIAL



WOLVERINE OPERATING COMPANY
of Utah, LLC

Energy Exploration in Partnership with the Environment

December 28, 2005

Ms. Diana Whitney
Utah Division of Oil, Gas & Mining
1594 W. N. Temple, Suite 1210
Salt Lake City, UT 84114-5801

RE: Wolverine Federal #17-2
Wolverine Federal #17-3
Wolverine Federal #8-1

Dear Ms. Whitney:

Enclosed please find completion forms with minor corrections made for each of the above referenced wells.

If you have any questions or concerns, please don't hesitate to contact me.

Sincerely,

Helene Bardolph

cc: WF #17-2 (Well Log File)
WF #17-3 (Well Log File)
WF #8-1 (Well Log File)

RECEIVED
JAN 03 2006

DIV. OF OIL, GAS & MINING

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

AMENDED REPORT ☒ FORM 8
(highlight changes)

5. LEASE DESIGNATION AND SERIAL NUMBER:
UTU-73528

6. IF INDIAN, ALLOTTEE OR TRIBE NAME
N/A

7. UNIT or CA AGREEMENT NAME
Wolverine Fed Expl Unit

8. WELL NAME and NUMBER:
Wolverine Federal #17-2

9. API NUMBER:
4304130031

10. FIELD AND POOL, OR WILDCAT
Covenant Field

11. QTR/QTR, SECTION, TOWNSHIP, RANGE,
MERIDIAN:
SESW 17 23S 01W 26

12. COUNTY
Sevier

13. STATE
UTAH

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

1a. TYPE OF WELL: OIL WELL ☒ GAS WELL ☐ DRY ☐ OTHER ☐

b. TYPE OF WORK: NEW WELL ☒ HORIZ. LATS. ☐ DEEP-EN ☐ RE-ENTRY ☐ DIFF. RESVR. ☐ OTHER ☐

2. NAME OF OPERATOR:
Wolverine Gas and Oil Company of Utah, LLC

3. ADDRESS OF OPERATOR:
55 Campau NW CITY Grand Rapids STATE MI ZIP 49503

PHONE NUMBER:
(616) 458-1150

4. LOCATION OF WELL (FOOTAGES)

AT SURFACE: 830' FSL & 1910' FWL, Sec 17

AT TOP PRODUCING INTERVAL REPORTED BELOW: 810' FSL & 1780' FWL, Sec 17

AT TOTAL DEPTH: 841' FSL & 1732' FWL, Sec 17

14. DATE SPUDDED:
7/22/2004

15. DATE T.D. REACHED:
8/16/2004

16. DATE COMPLETED:
11/1/2004

ABANDONED ☐ READY TO PRODUCE ☒

17. ELEVATIONS (DF, RKB, RT, GL):
5846 5847 5847 5835

18. TOTAL DEPTH: MD 6,750
TVD 6,724

19. PLUG BACK T.D.: MD 6,698
TVD 6,672

20. IF MULTIPLE COMPLETIONS, HOW MANY? *

21. DEPTH BRIDGE MD
PLUG SET: TVD

22. TYPE ELECTRIC AND OTHER MECHANICAL LOGS RUN (Submit copy of each)

Density Neutron; Dual Laterolog/MSFL; Microlog; EMI; Sonic

23.

WAS WELL CORED? NO ☐ YES ☒ (Submit analysis)
WAS DST RUN? NO ☐ YES ☒ (Submit report)
DIRECTIONAL SURVEY? NO ☐ YES ☒ (Submit copy)

24. CASING AND LINER RECORD (Report all strings set in well)

HOLE SIZE	SIZE/GRADE	WEIGHT (#/ft.)	TOP (MD)	BOTTOM (MD)	STAGE CEMENTER DEPTH	CEMENT TYPE & NO. OF SACKS	SLURRY VOLUME (BBL)	CEMENT TOP **	AMOUNT PULLED
18.00"	14"	--	12	92		G 250	37	surface	zero
12.25"	9.625 J55	36	12	1,542		Lite 360	114	surface	zero
						Type 5 280	42	--	--
8.75"	7" P110	23	12	5,421		50:50 per 595	181	1500'	zero
6.25"	4.5 P110	11.6	12	6,750		90	19	5610'	zero

25. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)
2 1/2	5							

26. PRODUCING INTERVALS

FORMATION NAME	TOP (MD)	BOTTOM (MD)	TOP (TVD)	BOTTOM (TVD)
(A) Navajo	6,058	6,750	6,036	
(B) Navajo	6,058	6,750	6,036	
(C)				
(D)				

27. PERFORATION RECORD

INTERVAL (Top/Bot - MD)		SIZE	NO. HOLES	PERFORATION STATUS		
6,378	6,388	10'	40	Open	<input checked="" type="checkbox"/>	Squeezed <input type="checkbox"/>
6,310	6,334	24'	96	Open	<input checked="" type="checkbox"/>	Squeezed <input type="checkbox"/>
				Open	<input type="checkbox"/>	Squeezed <input type="checkbox"/>
				Open	<input type="checkbox"/>	Squeezed <input type="checkbox"/>

28. ACID, FRACTURE, TREATMENT, CEMENT SQUEEZE, ETC.

DEPTH INTERVAL	AMOUNT AND TYPE OF MATERIAL
6378 - 6388	1000 gal 7-1/2% NEHCL w/ 60 /BS
6310 - 6334	1500 gal 7-1/2% NEHCL w/ 190 BS

RECEIVED

JAN 03 2006

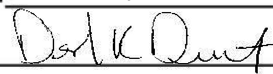
DIV. OF OIL, GAS & MINING

29. ENCLOSED ATTACHMENTS:

☒ ELECTRICAL/MECHANICAL LOGS ☒ GEOLOGIC REPORT ☒ DST REPORT ☒ DIRECTIONAL SURVEY
☐ SUNDRY NOTICE FOR PLUGGING AND CEMENT VERIFICATION ☒ CORE ANALYSIS ☒ OTHER: Mud Log

30. WELL STATUS:

Producing

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		FORM 9																														
SUNDRY NOTICES AND REPORTS ON WELLS Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		5. LEASE DESIGNATION AND SERIAL NUMBER: UTU-73528																														
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12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc. Wolverine Gas and Oil Co. of Utah, LLC intends to workover the Wolverine Federal 17-2 to recomplete additional pay, between existing Navajo perforation intervals. Subsequent acid stimulations are then planned, before an ESP will be run to return the well to production. A report will be submitted after work has been completed, to summarize the actual work activities performed.																																
NAME (PLEASE PRINT) Helene Bardolph		PHONE NUMBER 616 458-1150																														
SIGNATURE N/A		TITLE Engineering Administrative Assistant																														
DATE 2/19/2013		Accepted by the Utah Division of Oil, Gas and Mining Date: February 19, 2013 By: 																														

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUNDRY NOTICES AND REPORTS ON WELLS
Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

FORM APPROVED
OMB No. 1004-0135
Expires January 31, 2004

SUBMIT IN TRIPLICATE - Other instructions on reverse side

1. Type of Well

☒ Oil Well ☐ Gas Well ☐ Other

2. Name of Operator

Wolverine Gas & Oil Company of Utah, LLC

3a. Address

55 Campau NW, Grand Rapids, MI 49503

3b. Phone No. (include area code)

616-458-1150

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

SHL: 830' FSL & 1901' FWL

BHL: 841' FSL & 1732' FWL (TD)

23S 1W 17

5. Lease Serial No.

UTU 73528

6. If Indian, Allottee or Tribe Name

N/A

7. If Unit or CA/Agreement, Name and/or No.

Wolverine Federal Unit

8. Well Name and No.

Wolverine Federal 17-2

9. API Well No.

43-041-30031

10. Field and Pool, or Exploratory Area

Covenant

11. County or Parish, State

Sevier

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other <u>Workover</u>
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

Wolverine Gas and Oil Co. of Utah, LLC intends to workover the Wolverine Federal 17-2 to recompleat additional pay, between existing Navajo perforation intervals. Subsequent acid stimulations are then planned, before an ESP will be run to return the well to production. A report will be submitted after work has been completed, to summarize the actual work activities performed.

RECEIVED

RECEIVED

MAR 08 2013

FEB 25 2013

DIV. OF OIL, GAS & MINING

Richfield BLM Field Office

14. I hereby certify that the foregoing is true and correct
Name (Printed/Typed)

Ron Meredith

Title Senior Production Engineer

Signature



Date 02/19/2013

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

Accepted For Record Purposes

Title

Date

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on reverse)

SUNDRY # 13SLA-00355

CONFIDENTIAL

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		FORM 9
SUNDRY NOTICES AND REPORTS ON WELLS Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		5. LEASE DESIGNATION AND SERIAL NUMBER: UTU-73528
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PHONE NUMBER: 616 458-1150 Ext		9. FIELD and POOL or WILDCAT: COVENANT
COUNTY: SEVIER		STATE: UTAH
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	<input checked="" type="checkbox"/> OTHER	
	OTHER: <input type="text" value="Workover"/>	
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc. Wolverine completed a workover on the Wolverine Federal #17-2 on April 25, 2013. New Navajo perforations were added from 6352'-6368' (16') with 3-3/8", 6 spf, casing guns and a wireline unit. After perforating, tubing and a packer were run to 6269' and all existing Navajo perf intervals (6310' – 6388') were acidized together. The treatment consisted of 4,800 gals of 7½% HCl and was pumped at an average pressure of 1450 psi. After displacing the acid and rigging down pumping equipment, the well was swabbed and the entire load volume was recovered. The well was returned to production at 107 BOPD and 685 BWPD. See attached WBD and Daily Reports for additional details.		
Accepted by the Utah Division of Oil, Gas and Mining FOR RECORD ONLY May 23, 2013		
NAME (PLEASE PRINT) Helene Bardolph	PHONE NUMBER 616 458-1150	TITLE Engineering Administrative Assistant
SIGNATURE N/A	DATE 5/9/2013	



Covenant Field
Federal 17-2
API# 43-041-30031

SE/SW Sec 17, T23N, R1W
Sevier County, Utah

- 4/14/2013 Roustabouts Spotted frac tanks, water filtration system, BOP's and flowback equipment, hooked up flowback lines, laid down oil absorbent around the well head, hooked up frac tanks and filled them with 4% KCL.
- 4/15/2013 Rig up service unit, rig up vac truck to the casing, ND wellhead, pumped 7 bbls of completion fluid down the tubing, NU BOP's. RU cable spooler and pulled out of the hole with ESP equipment, PU 3- $\frac{5}{8}$ " bit and casing scraper and tripped in the hole with 4 joints then encountered problems with the workover rig. SWIFN
- 4/16/2013 Opened well, 40 psi tubing, 40 psi casing, hooked up vac truck to the casing and finished tripping in the hole with the bit and casing scraper to PBTD. RU pump lines and reverse circulated the well with 120 bbls of completion fluid and still had dirty returns, continued circulating with 40 bbls of completion fluid until the returns were clear. RD pump lines and tripped out of the hole with the bit and casing scraper. SWIFN
Note: Tagged PBTD @ 6698; MD.
- 4/17/2013 Opened well, 0 psi tubing, 0 psi casing. PU and trip in hole with plug, RH, 4' sub, 1 joint 2- $\frac{3}{8}$ " tubing, cup type SN and tubing to surface. Set bridge plug at 6343', set packer at 6270', RU swab equipment and swabbed well as follows:
Swab runs - 13
Total fluid recovered - 87 bbls
Perf intervals open -6310-6334'
RD swab equipment, released plug and packer. Reset RBP at 6405', set packer at 6270'. RU swab equip. and swabbed well as follows.
Swab runs - 4
Total fluid recovered - 43 bbls
Perf intervals open -6378-6388'
Note: Shut down swabbing after run 4 due to communication from the upper perf interval.
- 4/18/2013 Opened well, 0 psi tubing, 0 psi casing. Released packer and reset at 6240', pressure tested to 1200 psi, released packer and reset at 6343', RU swab equipment and made 4 swab runs and verified communication behind pipe. Released packer and pulled out of the hole with tubing and packer.
Note: Due to behind pipe communication between perf intervals 6310 and 6388 we will perforate the new interval from 6352-6368' then acidize all three of the intervals from 6310 to 6388 at one time.
- 4/19/2013 Opened well, 0 psi tubing, 0 psi casing. Pulled out of hole with kill joints, RU Wireline unit and perforated 6352-6368' with 3 $\frac{3}{4}$ " gun loaded 6 spf on 60° Phasing.
RD and released wireline unit. PU and tripped in hole with tubing and HD packer to 6269', RU Halliburton acid equipment, opened by-pass on packer and spotted 23 bbls of 7- $\frac{1}{2}$ % HCL acid, closed by-pass on packer, pressured annulus to 560 psi, pumped the remaining 91 bbls of acid at 1.7 bpm @ 1460 psi and displaced with 25- $\frac{1}{2}$ bbls of completion fluid. RD and released acid equipment.
RD and released acid equipment, RU swab equipment and swabbed well as follows:
Swab runs - 9
Total fluid recovered - 65 bbls
Perf intervals open -6310-6388'
- 4/20/2013 Opened well, 0 psi tubing, 0 psi casing. RU swab equipment and swabbed the well as follows:

Swab runs - 26

Total fluid recovered - 225 bbls

Perf intervals open -6310-6388'

SWIFN

4/21/2013

Opened well, 0 psi tubing, 0 psi casing. Released packer and reset at 6343' to swab the middle and the bottom perf intervals only. RU swab equipment and swabbed well as follows.

Swab runs - 16

Total fluid recovered - 158 bbls

Perf intervals open -6352-6388'

RD swab equipment, pulled out of hole with tubing, packer and plug. RIH with one stand and SWIFN.

4/22/2013

No activity

4/23/2013

No activity

4/24/2013

No activity

4/25/2013

Opened well, 0 psi tubing, 0 psi casing. RU cable spoolers and TIH with Centinel, motor, seal section, pump, 6' x 2 3/8" sub, drain sub, 1 joint 2 3/8" tubing, 2 3/8" XN nipple, 193 joints 2 3/8" tubing and 2 3/8" x 2 7/8" XO.

ND BOP's, NU wellhead. RDMOSU and started well.

Note: Installed new stainless steel wellhead piping on the well due to failures with the internal coating on the wellhead piping that was installed on the well previously.

Supervisor:

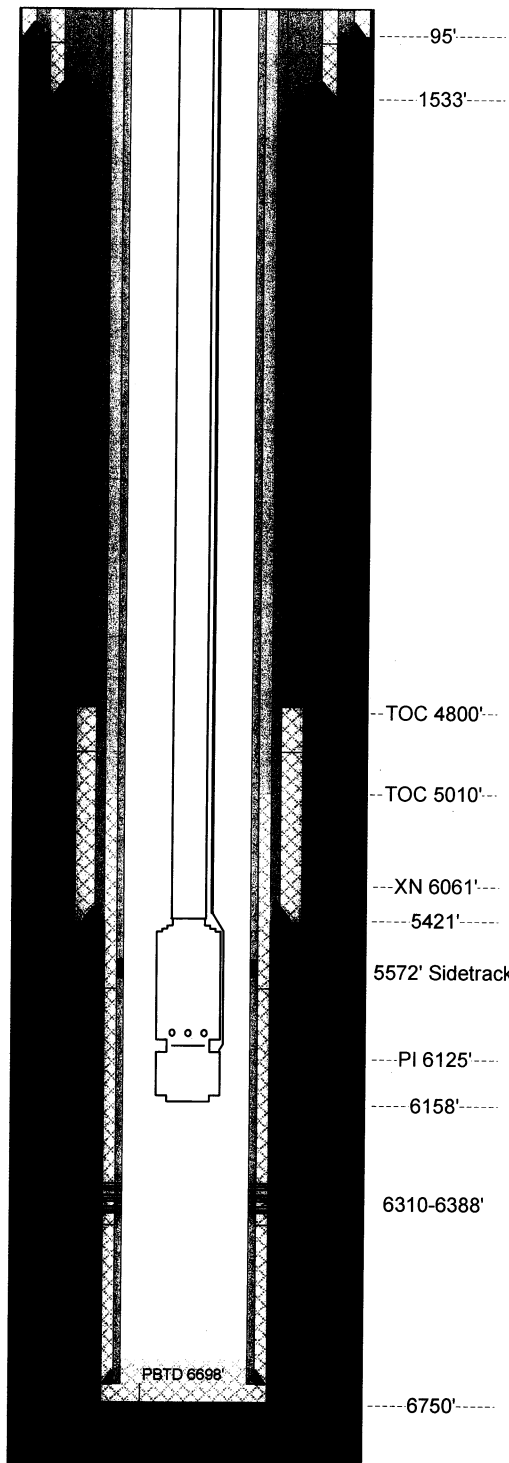
Tony E. Cook

Rig Operator:

Wolverine Federal 17-2
API # 43-041-30031
Covenant Field
Section 17, T23S, R1W
Sevier County, Utah

(Not to Scale)

Ground Elevation: 5,835'
 KB Elevation: 5,847'



Deviated Well

Surface: 830' FSL, 1910' FWL, SE SW, 17-23S-1W
 Top of Pay (6058' MD): 808' FSL, 1789' FWL, SE SW, 17-23S-1W
 Total Depth (6750' MD): 841' FSL, 1741' FWL, SE SW, 17-23S-1W

Conductor Casing

Size: 14"
 Depth Landed: 92'
 Cement Data: Cemented to surface with 250 sks Class "G"

Surface Casing (7/4/04)

Size/Wt/Grade: 9-5/8", 36#, J-55, STC, 8rd
 Depth Landed: 1533' MD
 Cement Data: 360 sks Light (12.8 ppg, 1.78 cf/sk), 280 sks Type V (15.6 ppg, 1.18 cf/sk)

Intermediate Casing (7/20/04)

Size/Wt/Grade: 7", 23#, HCP-110, LTC, 8rd
 Depth Landed: 5421' MD
 Cement Data: 595 sks 50:50 Poz (13.0 ppg, 1.71 cf/sk), 90 sks Type 5 (15.8 ppg, 1.16 cf/sk) Est. TOC @ 4800'

Production Casing (8/21/04)

Size/Wt/Grade: 4-1/2", 11.6#, N-80, LTC, 8rd
 Properties: 7780 psi burst, 3.875" drift, 4.000" ID, 0.0155 Bbl/ft Capacity
 Depth Landed: 6750' MD (Estimated)
 Cement Data: 95 sks 50:50 Poz (13.4 ppg, 1.49 cf/sk)

Navajo Perforations

6310' - 6334' MD (6286'-6310' TVD), 24', 96 holes (10/29/04)
 6352' - 6368' MD (6328'-6344' TVD), 16', 96 holes (04/19/13)
 6378' - 6388' MD (6354'-6364' TVD), 10', 40 holes (10/24/04)

Mid-Perf = 6349' MD (6325' TVD), 50' M (50' TV), 232 holes

Tubing (04/25/13)

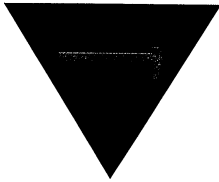
XN Nipple 6058' WLM (5793' TVD)
 ESP Intake 6122' WLM (5855' TVD)
 Centinel 6151' WLM (5883' TVD)
 End of BHA 6155' WLM (5887' TVD)

Fish (8/8/04)

6050' - 6128' KB, Core bit, core barrel, jars, float sub, x-over, and 1 jt
 HWDP cemented in open-hole. KO @ 5572' KB to sidetrack.

PBTD

(04/19/13) Tubing tagged @ 6698' MD
 (08/19/08) Tubing tagged @ 6698' MD
 (10/23/04) Tubing tagged @ 6698' MD



Wolverine Federal 17-2
API # 43-041-30031
Covenant Field
Section 17, T23S, R1W
Sevier County, Utah

Tubing Detail (4/25/13)

	12.00	KB
	-3.00	Landed above GL
	-3.00	Wireline correction
1	0.21	X-over - 2-3/8", EUE, 8rd cplg x 2-7/8", EUE, 8rd pin
193	6054.93	Tubing - 2-3/8", 4.7#, N-80, EUE, 8rd
1	1.10	XN Nipple
1	31.31	2-3/8" 4.7#, N-80, EUE, 8rd
1	0.45	Drain sub
1	6.30	Tubing Sub - 2-3/8", 4.7#, N-80, EUE, 8rd
1	0.44	Pump discharge
1	11.95	Pump
1	12.78	Pump with intake
1	9.10	Seal
1	18.95	Motor
1	4.10	Centinel

6157.62' EOT (5889' TVD)

Note: No check in this well.

Tubing capacity = 0.00387 Bbl/ft, Burst = 11200 psi, Joint Yield = 104300 lbs

Directional Data:

<u>MD</u>	<u>TVD</u>	<u>Incl.</u>	<u>MD</u>	<u>TVD</u>	<u>Incl.</u>
500	500	2.1	4000	3987	5.3
1000	999	3.7	4500	4486	3.7
1500	1499	2.7	5000	4981	10.1
2000	1996	8.6	5500	5478	2.8
2250	2243	9.7	6000	5977	5.2
2500	2491	3.5	6500	6475	4.9
3000	2891	27.1	6750	6724	6.0 E
3500	3488	3.9			

Wellhead Information

- Tubing head flange is 7-1/16", 5M with a 2-7/8" EUE 8rd top connection

Stimulation

04/19/13: All perms were treated with 114 bbls of 7½% FE acid (10 gpt FE-1A & 10 gpt FE-2A) with 2 gpt HAI-404M corrosion inhibitor, 5 gpt Pen-88M penetrating agent, and 5 gpt AS-5 Anti-sludge. ATR 1.7 BPM @ 1460 psi.

10/26/04: 6378' - 6388' w/ 1000 gal 7.5% HCl with Morflo III. BDP = 3800 psi, ATR = 3.6 BPM @ 3400 psi, ISIP = 950 psi

10/30/04: 6310' - 6334' w/ 2500 gal 7.5% HCl with Morflo III. ATR = 4.3 BPM @ 3000 psi, ISIP = 933 psi

Notes

Surface Location: Latitude = 38° 47' 51.07", Longitude = -111° 56' 05.24"

Originally reported landing depth for production casing is incorrect; it appears the casing collars were excluded from casing tally. Assumed casing was run to TD.

(10/23/04): Cement top at 5610' on CBL-CCL-GR

(1/16/07): Available Logs: DLL, SDL/DSN, EMI, CBL, SFT, FWS